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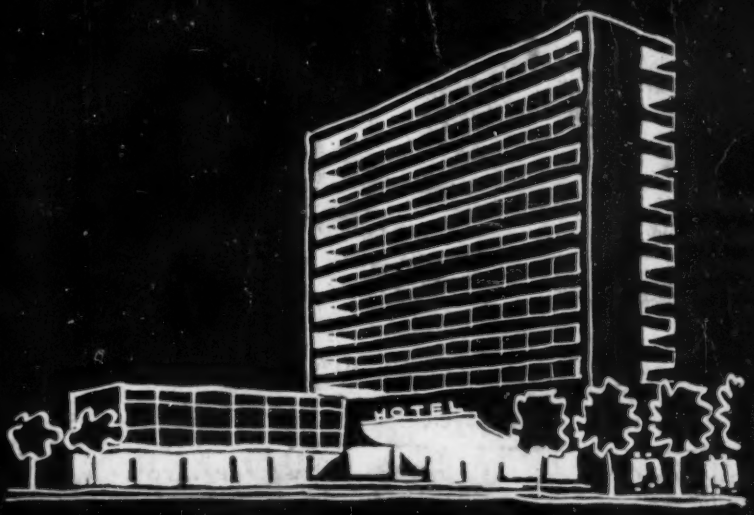

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COMBINED WITH AMERICAN ARCHITECT AND ARCHITECTURE

VOL. 95 **JANUARY • 1944** NO. 1

COVER: Illustration by Francis X. Gina.

REPUTATION IN THE MAKING 49
An Editorial . . . by Kenneth K. Stowell

COLLABORATION WHERE IT COUNTS 50

BUILDING TYPES STUDY No. 85 . . . HOTELS 52

PLANNING NOW FOR POSTWAR PATRONS 52
By James S. Warren, Editor, Hotel Management

REVITALIZE FOR V-DAY REVENUE 53
Hotel modernizing principles and practice as exemplified by the proposed remodeling of the Wenonah Hotel, Bay City, Mich. By Francis Keally, A.I.A.

MODERNIZING THE HOTEL EQUIPMENT 65
By Sullivan A. S. Patorno, Consulting Engineer

REMINDERS FOR HOTEL PLANNING 66
By Francis Keally, A.I.A.

A ONE-STORY HOTEL FOR A TEXAS TOWN 67
Dow Hotel, for Dow Chemical Co., Freeport, Texas. Alden B. Dow, Architect

TRENDS IN HOTEL LIGHTING 69
By A. Ward Hendrickson

QUICKLY CONVERTED FOR CASUALTIES 71
How Halloran General Hospital, Staten Island, N. Y., was created by U. S. Corps of Engineers and William Gehron, Architect, who altered and enlarged an almost-completed state hospital.

PLANNED FOR PREFABRICATION 79
Parker Homes, Sacramento, Cal., for Federal Works Agency. William Wilson Wurster, Architect: Charles F. Dean, Associate.

THE ROAD BACK TO NORMAL BUILDING 85
By Abner H. Ferguson, Commissioner, Federal Housing Administration.

A PROBLEM OF PRESSURES IN PLANNING 87
The Leslie Apartments, Forest Hills Gardens, New York. Alfred Fellheimer and Steward Wagner, Architects and Engineers.

TIME-SAVER STANDARDS . . . Hotel Laundries 93

PRIVATE PRACTICE CHALLENGED 110
By Charles C. Platt.

THE RECORD REPORTS . . . News from the Field 7

REQUIRED READING 26

FOR BETTER BUILDING 96
News of materials, equipment and methods

INDEX TO ADVERTISEMENTS 134

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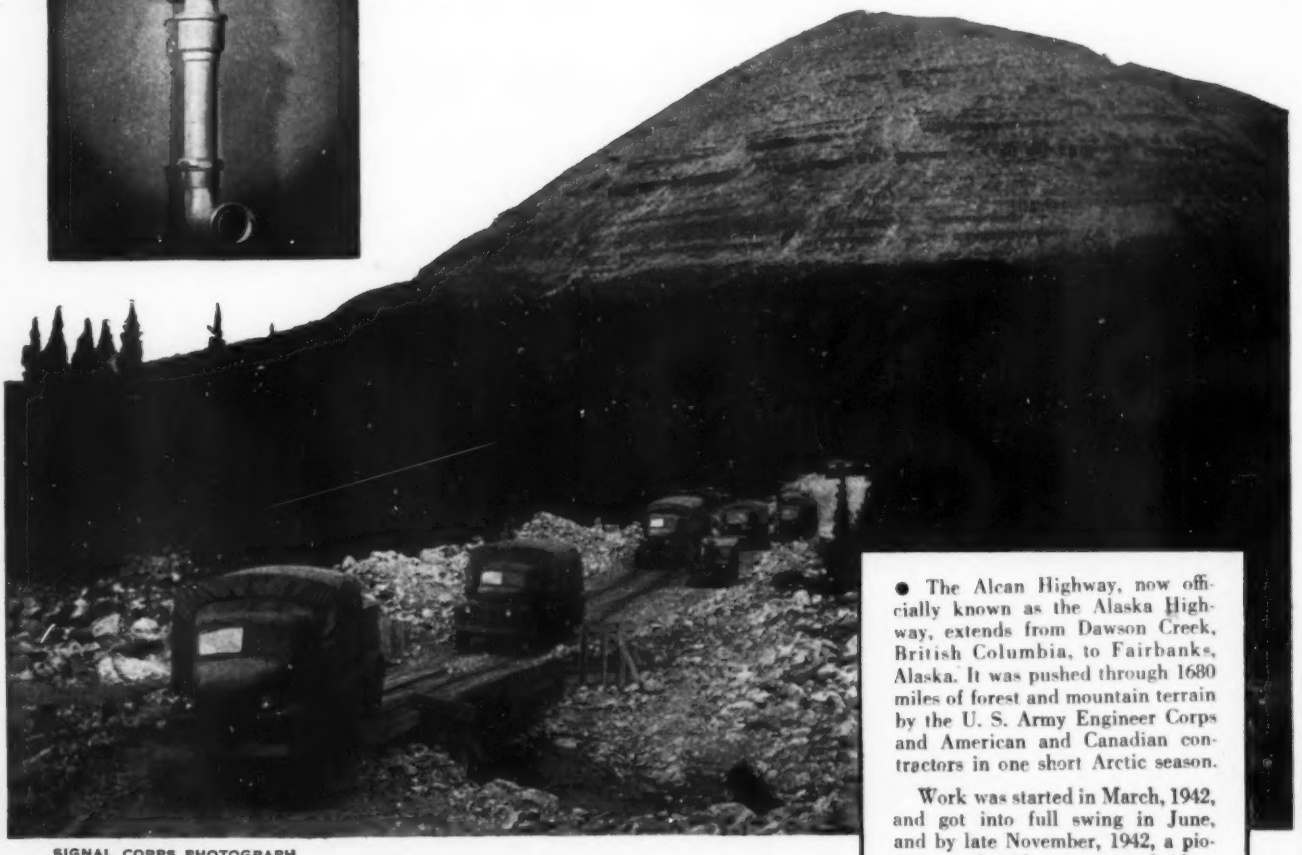
WATROUS "V" FLUSH VALVES SERVE ON THE ALASKA HIGHWAY



SIGNAL CORPS PHOTOGRAPH

● The Alcan Highway, now officially known as the Alaska Highway, extends from Dawson Creek, British Columbia, to Fairbanks, Alaska. It was pushed through 1680 miles of forest and mountain terrain by the U. S. Army Engineer Corps and American and Canadian contractors in one short Arctic season.

Work was started in March, 1942, and got into full swing in June, and by late November, 1942, a pioneer road with temporary bridges was ready for winter transport of army supplies to the Alaskan front. The view above shows a section of the first road.

Then in 1943 the road was entirely rebuilt, partly on new location, and was surfaced with gravel. The road is now a minimum width of 24 ft.

ALONG the 1680 miles of the Alaska Highway in the various types of buildings to be found on a project of this kind, several hundred "V" model Watrous Flush Valves are operating under severe service conditions.

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BULLETIN NO. 858-W gives simplified specification data on "V" model Watrous Flush Valves. The 1943 Sweet's Catalog File Sec. 27, Catalog No. 39, also covers this valve as well as the regular line of Watrous Flush Valves for postwar projects.

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Watrous Flush Valves

THE RECORD REPORTS

Postwar Planning • Trend to Local Control • Airport Developments Important • Materials Outlook • Who Gets What is Real Issue • Effects of Reconversion

THE CONVERSATION and government literature known in Washington as "postwar planning" for the most part fall into those well-known types, the real and the ideal. The former is concerned with money and who will have it on V-Day. It involves liquidation of the war in the literal sense of converting wartime assets into cash. The latter is a kind of verbal mosaic of such terms as "full employment," "total national product," and "living standards." Agencies without important war jobs go in for it a great deal. Thus far housing and, indeed, the whole construction industry have been dealt with in the more dreamy manner.

There is, of course, a vast liquidation job to be done. Repeatedly, the armed services and the RFC let it be reported or announced that they have decided upon, started or completed inventories of real property holdings. They argue about whether each shall sell its own, or whether there shall be an over-all sales agency and worry about how to avoid inevitable charges of favoritism when the actual selling begins. Congressional committees are going over the same act, listening one after the other to the same lobbyists who tell them that the properties must be sold at fair prices, that present operators should be given special consideration, that all potential bidders should be given equal treatment, and that sales should not be allowed to depress the real estate market. Many, if not most, of the structures disposed of will require redesigning and remodeling. From all this verbiage there does emerge these few fairly clear facts:

1. The Army wants to liquidate as soon as it can, using the quickest possible means.

2. Anticipating a permanent world policing job, the Navy wants to retain much of its plant. It knows pretty well what it will retain, but is not yet saying anything.

3. The RFC is playing with an assortment of ideas for financing transfers. They boil down, pretty much, to taking long-term mortgages.

NHA Surveys

As to postwar housing, there is the feeling that it is a vastly important matter and that something should be done, documented by statistics. Careful surveys are being made by the National Housing Agency, for example, to determine how many dwelling units will be built in the first postwar year. As they are intended to be, the figures have been impressive—up to 400,000 single family structures at an average value of $5,000, with figures subsequently rising to 1,000,000 units annually.

Beyond statistical guessing—based, of course, on projected population and marriage trends, also on estimates of accumulated disrepair — there is not much that planners can say. Like much postwar business, the housing picture has definite outlines, expressible in large totals, but lacks detail. There is not as yet much technical certainty in trying to anticipate the permanent effects of the vast wartime migrations upon America's population map. Yet the question of whether war plant workers will stay where they are, go home, or migrate anew is fundamental.

Boom Like the Twenties

In the pictures by government economists of a happy and prosperous postwar decade, housing is generally placed in the foreground. Memories of the demobilization 25 years ago and the housing dearth at the start, with $125 single-room apartments and the 10-year building boom which followed, evoke expectations. With sketchy figures on how many families have doubled up and better figures on how many soldiers are married, the economists forecast the early, urgent necessity for 1,500,000 homes. Finally, because neither materials nor organization nor skill will be at hand promptly to create these homes, they foresee a long period of large volume construction, possibly a boom like that of the Twenties.

Trend to Local Control

On the political side there is a growing temper in Congress to put such issues as housing into local hands. The point is made that while the federal government greatly expanded its debt and undertakings, local governments have been able to retire their bonds and, for lack of materials, have deferred construction projects. In this connection, a bill by Representative Lynch of New York City to give moderate financial assistance to states which want immediately to blueprint their postwar jobs, may prove typical.

Airport Developments Important

Legislation which, if enacted, will affect skylines in most major cities as they spread into suburb and country is about to come before the House. This is the Lea bill to encourage airline development and to provide for

(Continued on page 10)

"Hey, Signor, get the ball for us, will you?"

—Drawn for the RECORD by Alan Dunn

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Men of action are not "waiting for the sunrise." Their postwar plans are more than dreams. If a new schoolhouse is to be built they have the drafting and engineering under way. If a new industrial building is to be erected—or a present structure converted or remodeled—they know their minds and have their roll of blueprints.

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Heating, Ventilating and Air Conditioning EQUIPMENT

 (Continued from page 7)

airport planning. Subject to court review, those running the ports will have the power to condemn surrounding properties if, in jutting skyward, they endanger the planes slanting into or out of port. Sponsored by the industry and the Civil Aeronautics Board, the bill is powered partly by the general enthusiasm for aircraft; because it hinders railroad purchase of airlines it is fought by the roads. Possibly because they know little about it, real estate and construction interests are not taking sides.

If even the most laborious postwar studies have the transient air of table-talk, planning for the next six months is genuine and worrisome. Except for special cases that may arise, the government program for housing of war workers ends in June or July. Indeed, since Congress refused to give NHA its full appropriation, it may end in March or April. The question "what then?" is answered by glib expressions of hopes and possibilities that reveal deep concern. The hope that the industry will carry forward is based on the fairly reasonable possibility that WPB will release the materials.

Materials Outlook

It is evident, although there has been no statement thereto, that NHA has asked WPB to amend L-41 which now inhibits construction. It is probable that some of the WPB units have joined in that request: the Steel Division favors releasing more steel for civilian use; the Office of Civilian Requirements may have made suggestions. The fact that spokesmen for the Facilities Bureau say that the question has not been discussed should be interpreted as meaning that a revised regulation has not been drafted and circulated—which, of course, is irrelevant.

Loosening of the regulation is likely for housing in war plant communities, but not so likely for other construction. With dozens of limitation orders covering all of the odds and ends of life being relaxed, it is hard to imagine that housing will be overlooked. More materials for industrial repair and replacement will create pressure to get as much for homes.

The revision is likely to release mineral products, but there is not the faintest chance that builders will get more wood very soon.

That the program was set to end in mid-1944 is itself interesting and may throw some light on top planning of war output. The estimated date at which NHA would have filled in the most important points was based upon War Manpower Commission figures on the recruiting of new war-workers. These, in turn, are based upon expected progress of the full war program, as charted by WPB.

Who Gets What is Real Issue

The release of additional materials for housing will raise the interesting question of who gets them. On this score, leaders in private industry are being consulted in various fields for their ideas. There will be enough for some but not for everybody. Because, after WPB regulations are revised, private construction will have replaced NHA jobs, it will probably be necessary to allow a few builders sufficient supplies in preference to distributing an inadequate amount throughout the industry. There is no doubt that junky houses could be sold, but the Agencies prefer the headache of selecting a small number of contractors.

Governmental Appropriations

The relationship of NHA to Congress entails some of the more esoteric points about government finance. The Agency asked for $200,000,000 in order, with cash in hand, to make contracts now for projects to be started next spring; the House offered $50,000,000 which the Senate raised to $100,000,000. In the final action just before the Christmas holidays the amount was left at $50,000,000.

The $200,000,000 wanted in appropriations would match that amount "authorized" by the Lanham Act. Other agencies than NHA are said to have assumed that an "authorization" without an appropriation permits the government unit to contract, if not to pay out money, to the full amount authorized. NHA is dealing cautiously with Congressional feelings and assumes no such thing. Contracts, therefore, are being delayed.

NHA will probably take its budget cut by reducing remodeling jobs—perhaps, at the very time WPB releases materials for that purpose.

Effects of Reconversion

Over the next several months, sudden shifts in the war program, with production turning from tanks to trucks, skipping lighter ammunition, going hard on landing craft and planes, will make the building trade more spotted. Sudden cut-backs in war jobs now are vacating thousands of new dwellings or preventing their being occupied in the first place. At certain locations sudden news developments may result in their never being built, or in contracts not being let.

Among the economists, there is usual discussion of whether the postwar home will be a miracle of gadgets, whether it will be made of different materials and whether designs will change. There is this much to be said: in the early postwar years, when materials still are scarce, government control is likely. It is doubtful that much will be allowed for experiment. Over the longer term it may be found that the United States has used up some of its low cost metal supply and that it will be necessary to draw upon high cost mines or imports. This will put a premium on new ideas. Whether fuel oil will get too expensive, giving coal furnaces the smartness of economy, is a stormy political issue.

New War Plants Virtually Out

Construction of war plants, which has been moving downward for a year and a half, just isn't worth talking about, and, indeed, Donald M. Nelson has stopped talking about it. His last monthly report on war production gives no mention whatever to the subject. Neither the greater abundance of construction metals nor shifts in the war program will bring about a revival. On the contrary, there was a moment some time this fall, not identifiable with precision, when the Army and Navy suddenly became cost-conscious. Existing plant is being retooled to take care of shifting production programs.

Public construction is almost restricted to working out the remaining $150,000,000 of the $500,000,000 authorized in the Lanham act for community facilities. The Senate Appropriations Committee recently approved the request of the Federal Works Agency for a $50,000,000 appropriation against the $150,000,000, but the House objected and the amount was stricken from the Bill. The Agency had requests for $119,000,000 but asked just enough to carry it for three or four months. Schools, hospitals and sewage rank high among classes of projects.

WPB is rapidly removing restrictions on miscellaneous fixtures. Materials were allocated to make thermostats. Radiator valves will be made of brass after January 1. At the request of the industry, WPB is giving less priority assistance to those trying to buy furnaces. The manufacturers recommended that the meager output be distributed chiefly for replacement on the basis of past sales. Because the recommendation may conflict with general policy on distribution of scarce goods—aiming to help new communities—

(Continued on page 102)

Here Is What Moduflow Does!

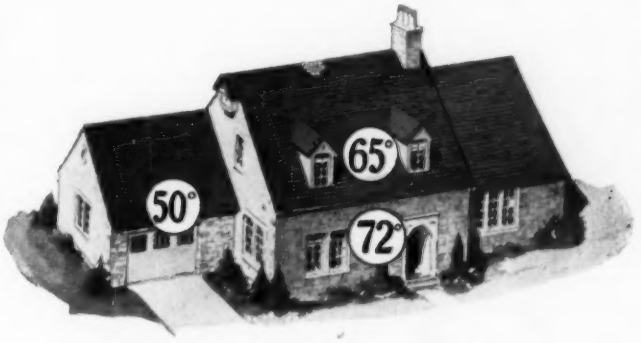
THE OWNER of every home, large or small, old or new, as well as every operator of a commercial building, is a prospect for the Moduflow Control System, because it eliminates the glaring fault of present day automatic heating—intermittent delivery of heat. Instead, Moduflow, as its name implies, provides a continuous flow of heat at exactly the temperature required to offset heat losses and to maintain room temperatures at the desired level. It does away with the alternate periods of hot and then cold radiators or registers and thus prevents stratification, drafts, overheating and underheating. Also, the Moduflow Sectional Control System enables home owners to maintain different sections or rooms at varying comfort or economy temperature levels, further eliminating fuel waste. Living quarters, for example, may be kept at 72; kitchens and bedrooms at 65; attached garage at 40 to 50; nurseries at 75. Most existing homes, however, to lend themselves to this sectionalized or zone heating, will require some change in the piping or duct work.

Here Is How Moduflow Does It!

THE PRINCIPLES of the Moduflow Control System are simple, and, in fact, not new. Actually, Minneapolis-Honeywell engineers have applied them to commercial buildings for 10 years or more. Only recently, however, has Moduflow been adapted to homes. Exhaustive tests have proved both its economy and comfort.

As stated before, the Moduflow System provides a continuous flow of modulated heat into each room. This is accomplished by maintaining boiler or furnace bonnet temperatures at a fixed level. By automatically mixing heat from this reservoir with return water or air to exactly the temperature called for, and continuously circulating this mixture through the heating system, the room thermostat is constantly kept satisfied without overheating. In the case of steam heat, only enough steam to satisfy the thermostat is circulated.

The cost of the Moduflow System for existing homes is surprisingly low—actually no more than that of a modern washing machine. Fuel savings alone will easily offset this expense. In new homes, it is even less. It is easy to see why the Moduflow System will revolutionize post-war heating. Minneapolis-Honeywell Regulator Company, 2804 Fourth Avenue South, Minneapolis 8, Minnesota. Branches and distributing offices in all principal cities.



New post-war homes can be sectionalized or zoned so that the Moduflow System will maintain rooms or sections at various comfort or economy temperatures.

Personalized Apartment Control

The post-war apartment will permit each tenant to maintain his temperature to his own liking—or even individual sections of it may be kept at various comfort or economy levels with the Moduflow System.

"Moduflow" is now being introduced through the radio and general magazines. Through these mediums a non-technical booklet is being distributed to the public. A little later a technical booklet will be ready for the trade.

MINNEAPOLIS

Honeywell

TEMPERATURE CONTROL

REQUIRED READING

Middle Temple Hall after a raid. From "The Bombed Buildings of Britain"

THE BOMBED BUILDINGS OF BRITAIN

Edited by J. M. Richards, with notes by John Summerson. New York (114 Fifth Ave.), Oxford University Press, 1943. 8 by 11¼ in. 140 pp. $4.50.

Here is a book as beautiful as it is awesome: a photographical record of a small part of the bomb damage done in the British Isles during the Blitzkrieg of 1940 and 1941. As the editor says in his foreword, it does not claim to be an exhaustive survey of all the architectural damage done, but is content to illustrate the damage done to buildings of architectural note.

The book is divided into nine sections, the first, and by far the longest, of which is for London. There is one each for the six provincial cities that have suffered most severely—Bristol, Coventry, Portsmouth, Plymouth, Manchester and Liverpool—and one for other large towns in which for one reason or another the architectural losses were less severe. The final section is devoted to damage in the country and the smaller towns. The index sensibly follows the same general plan, listing all buildings illustrated under the city or town in which they stand —or stood.

The photographs are grouped in each section first according to type (e.g., churches—and how many of them there are!) and then as far as possible in order of date.

Many of the photographs, particularly those of London and Coventry, are already familiar to American as well as to British readers, but the majority will be new in this country at least. As photographs they are excellent. As a record of the beauty and historical interest destroyed, they are heartbreaking. For these are the buildings which any casual visitor to England will remember, and from which architects the world over have drawn inspiration.

Many of the photographs are accompanied by small engravings or early prints showing the buildings as they originally looked. Each is augmented by an explanatory note by Mr. Summerson, giving concisely and clearly the history of the building in question, and not infrequently an apt little evaluation of its architectural merit.

POSTWAR PLANS OF THE UNITED NATIONS

By Lewis L. Lorwin. New York (330 West 42nd St.), The Twentieth Century Fund, 1943. 319 pp. $2.50.

The survey of the United Nations' postwar plans, made by Dr. Lorwin at the request of the Trustees of the Twentieth Century Fund, has given us in this book a factual report on plans put forward by responsible governmental and private groups in each country for that country's own internal development after V-Day.

All the United Nations, Dr. Lorwin finds, have in common the postwar aim "to improve the economic and social condition of the mass of the people," and are determined that out of this war shall come a finer and richer life for the average citizen.

While there is this general agreement on basic goals, the report points out, the individual nations show wide differences in the governmental and economic systems by which they hope to reach these goals, "especially with regard to the role of private and public enterprise in the postwar economy." In this respect the survey finds that the United Nations fall into three broad groups: (1) those assuming that "private enterprise will remain the dominant form of economic activity"—the United States, Great Britain, Canada, Australia, and some countries of western Europe; (2) those whose plans "assign a large and permanent place to state enterprise and to other forms of collective organization"—some countries in central Europe, a number of Latin American countries, and China; and (3) those favoring "complete nationalization of economic life and centralized planning methods"—the Union of Soviet Socialist Republics.

"The chief limitations of current postwar plans," Dr. Lorwin reports, "are the conflicting elements in the proposals of the different countries and their lack of coordination with plans for international economic and social organization."

BUILDING CODES

An Essential Tool in Urban Development. Washington, D. C., Construction and Civic Development Dept., Chamber of Commerce of the U. S., 1943. 15 pp. 6 by 9 in.

Prepared by George N. Thompson, chief of the Building Codes Section of the Division of Codes and Specifications of the National Bureau of Standards, this little pamphlet sets forth in simple, understandable language the *raison d'être* of building codes, and explains how they work. It is offered, according to the foreword, "to further a more widespread public understanding of the importance of building codes, and to enlist public support for their improvement and their efficient administration."

Starting logically with the role played by building departments, the pamphlet is explicit in the ways in which a building code affects the activities of realtor, architect, engineer, builder, craftsman, occupant and passerby. A section is devoted to building codes and the public safety, another to building codes and quality of buildings, a third to demolition of sub-standard buildings. Blighted areas and redevelopment are discussed in their relation to the necessity for greater code flexibility.

Although the pamphlet does not pretend to offer any new material, and is written more for the general public than for the architect or builder or engineer, it will be of value to anyone connected with the building industry because of its concise summation of a subject that is bound to loom large in any discussion of postwar construction.

PRECAUTIONARY CAMOUFLAGE

A Guide for Promoting Low Visibility Principles without Dependence upon Artificial Coverings. Washington, D. C., U. S. Office of Civilian Defense, 1943. 60 pp. 8 by 10½ in. illus. $0.15.

Precautionary camouflage is defined at the outset of this carefully prepared booklet as a "preventive" policy in planning and performing—"a watchfulness of measures which, if properly taken care of at the beginning of a design or construction procedure, might save tremendously in the later need for, and employment of, actual corrective camouflage."

Starting with an analysis of what the enemy sees, the author progresses to site selection and location of buildings within the site. Excellent diagrams here, as well as throughout the booklet, help to illustrate the principles used in camouflage. Practical ap-

(Continued on page 28)

AN ANNOUNCEMENT OF GREAT IMPORTANCE TO THE BUILDING INDUSTRY

WHAT types of electrical equipment will be needed in the homes of tomorrow?

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To achieve these ends, Westinghouse has organized the *Better Homes Advisory Staff*, consisting of men of recognized standing and wide experience in the housing field:

IRVING W. CLARK, MANAGER, who has been continuously engaged in housing activities for nearly 25 years . . . a nationally recognized authority on home planning and kitchen design . . . and a Director of Producers Council, Inc.

A. CARL BREDAHL, TECHNICAL DIRECTOR, formerly Chief of the Mechanic-Electrical-Utilities Division of the Federal Public Housing Authority from 1934 to 1943, where he was responsible for establishing design standards of mechanical and electrical installations for U. S. Government housing projects . . . and for 7 years electrical designer for Warren & Wetmore, New York.

JOHN S. VAN WART, REGISTERED ARCHITECT, formerly with Fred F. French Company, New York, who has designed many multiple dwellings, hotels, and institutions during the past 30 years . . . including Knickerbocker Village, 10 Gracie Square, and Blind Brook Lodge in the New York area.

SIX-POINT ADVISORY SERVICE

The Better Homes Department offers a *Six-Point Advisory Service* to the building profession, featuring advice on the following subjects:

1—Selection of correct types of electrical equipment for various classes of postwar homes.

2—Location and arrangement of fixed equipment, for conserving space and attaining maximum efficiency in arrangement of work cycles.

3—Accurate dimensions and clearances of equipment to insure proper installation and efficient operation.

4—Access for servicing of equipment—so necessary for periodic inspection and repair.

5—Location of lighting outlets and controls, for greater enjoyment, comfort, and safety in the home.

6—Utility service connections—including location and size of electric wiring, water supply, and drainage lines.

This Six-Point Advisory Service is available to architects, engineers, contractors, builders, public utilities, housing authorities, electrical inspectors, building management, and investment institutions.

Westinghouse Better Homes Department welcomes the opportunity of giving constructive assistance to those interested in postwar housing.

If you have any problems relating to the selection, installation, and use of home electrical equipment, write: Better Homes Department, Westinghouse Electric & Manufacturing Company, Pittsburgh 30, Pennsylvania.

A NEW APPROACH TO ELECTRICAL LIVING IN 194X

A carefully co-ordinated program . . . for assisting the building profession and homeowners in the attainment of *better wiring for better living* . . . will be announced soon. *Watch for it!*

Westinghouse

PLANTS IN 25 CITIES OFFICES EVERYWHERE

This
LOW-COST, LONG-WEARING FLOOR IS AVAILABLE TODAY
Specify ARMSTRONG'S Asphalt Tile

IF you're looking for an attractive, low-cost floor for today's authorized new construction and remodeling, Armstrong's Asphalt Tile will satisfy your needs. This smart floor is available without priorities.

Armstrong's Asphalt Tile is particularly suited to commercial and public building installations for it combines good looks with durability—a double feature that clients desire. Design possibilities are virtually unlimited because it's handset a block at a time and there is a wide range of harmonious plain and marble colors. And these colors go all the way through each tile. Armstrong's Asphalt Tile will withstand heavy traffic with a minimum of cleaning. It is moisture- and alkali-resistant and can be installed on concrete subfloors in contact with the ground.

For complete information about Armstrong's Asphalt Tile, consult Sweet's, Section 11, Catalog No. 46, or write for the free booklet, "Low-Cost Floors with a Luxury Look." Address Armstrong Cork Company, Resilient Tile Floors Department, 2401 Duke Street, Lancaster, Pa.

● *Shown above is the General Office of the Simplex Time Recorder Co., Gardner, Mass. The floor is Armstrong's Asphalt Tile in Tan and Burgundy Marble with Buff feature strips. Installation: Kesseli & Morse Company, Worcester, Mass. Architect: Stanley Kendall.*

ARMSTRONG'S RESILIENT TILE FLOORS

ASPHALT TILE—STANDARD, GREASEPROOF, INDUSTRIAL AND CONDUCTIVE · LINOTILE (OIL-BONDED) Ⓐ

REQUIRED READING

(*Continued from page 26*)

plications of low visibility principles are treated at length, and followed by a detailed discussion of manipulation of terrain. The appendices contain a discussion of the "Tone-down" principle of lowering visibility on existing buildings; several pages of visual illusions and their applications; and lists of the principal technical publications and directives of the Office of Civilian Defense, and of the national organizations concerned with various phases of civilian defense.

COMMUNITY ACTION FOR POSTWAR JOBS AND PROFITS

Washington, U. S. Dept. of Commerce, Industrial Series No. 6. 8 by 10½ in. illus. 39 pp. + guide sheets.

With postwar planning claiming more and more attention in every field, and the building industry expected to play a leading role in postwar re-employment, the Department of Commerce has issued this booklet as a practical guide for local chambers of commerce and other organizations of businessmen in their postwar planning.

Five concrete suggestions are offered: (1) the work pile plan of listing all probable immediate postwar repair and modernization work; (2) a survey of manufacturing opportunities the community may reasonably be expected to attract; (3) an estimate of the size of the problem the community will have to face at the end of the war because of expanded wartime population, and the taking of definite steps now to prepare to meet it; (4) a simple program to urge consumers, retailers, wholesalers, bankers, manufacturers and businessmen generally to build reserves of ideas and money for the postwar period; and (5) the strengthening of present business.

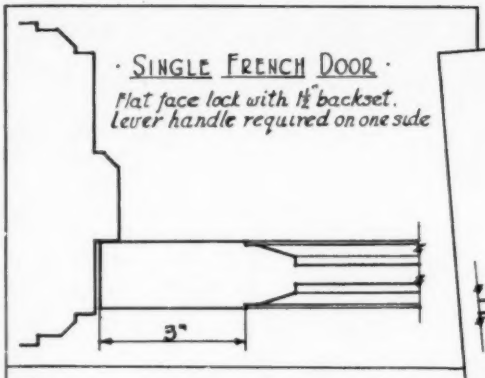
A valuable addition to the pamphlet is the 32-page section of guide sheets, perforated for easy clipping.

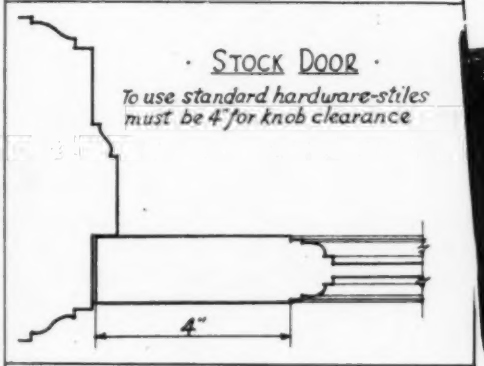
A BATSFORD CENTURY

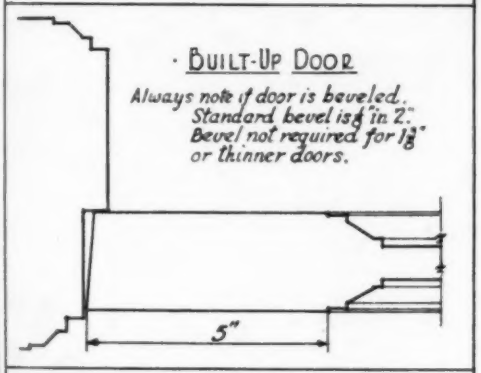
The Record of a Hundred Years of Publishing and Bookselling. Edited by Hector Bolitho. London W.1 (15 North Audley St.), B. T. Batsford, Ltd., 1943. viii + 148 pp. 6⅝ by 10¼ in. illus. 10s. 6d.

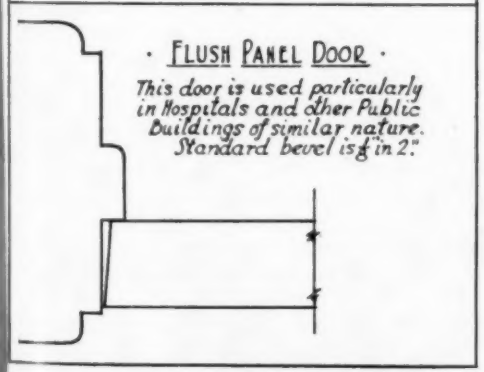
Any history of a publishing firm, particularly when issued over its own imprint, should be a typographically beautiful book—and this one is. Everything about it, from the delicate tones of the frontispiece to the selection of type and stock, is worthy of the tradition of fine printing to which the firm of B. T. Batsford, Ltd., has been loyal for a full hundred years.

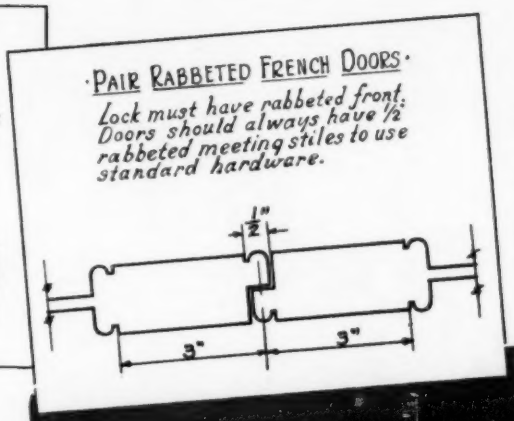
(*Continued on page 30*)








· FLUSH PANEL DOOR ·
This door is used particularly in Hospitals and other Public Buildings of similar nature. Standard bevel is ⅛" in 2".


· PAIR RABBETED FRENCH DOORS ·
Lock must have rabbeted front. Doors should always have ½" rabbeted meeting stiles to use standard hardware.
1"
½
3"
3"

A GOOD RULE

Select your hardware first — then detail to suit it. American manufacturers have standardized to a great degree. By making your details to suit these hardware standards you will *save* your clients' *money*, *expedite delivery*, and *eliminate* many aggravating hardware *problems*.

DETAIL
with an eye on Hardware
BACKSET — Distance from front of lock to center of key hole or center of knob.
SPACING—Distance from center of key hole to center of knob.

LOCK manufacturers have standardized lock backset and spacing dimensions for 3", 4", 5" or 5½" door stiles. This was necessary to secure proper knob clearance, and to insure a well-balanced appearance when installed.

Other details, such as thickness of door and use of bevel, have also been anticipated — and proper hardware is available. In cases where narrow stiles require the use of lever handles, manufacturers can provide locks with spring tension adequate to support the handles in a horizontal position, without sagging or dragging on latch bolt.

A keen eye on the hardware *when detailing* will avoid a black eye on the job.

☆ ☆ ☆

Let's co-operate: you consider your hardware requirements *early*, and we will gladly help you solve *special* hardware problems. Lockwood Builders' Hardware is featured in Sweet's Architectural Catalogs.

A

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HARDWARE MFG. CO.

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For Industrial Needs

In spite of the heavy demands of war production, Silv-A-King—specialist in industrial lighting for close to a quarter-century—is regularly filling priority orders for both fluorescent and incandescent lighting equipment. Silv-A-King lighting units offer many advantages in over-all efficiency, easy installation and maintenance—and all equipment conforms to RLM and other recognized standards for high quality and efficiency.

Silv-A-King lighting service—which costs nothing extra—includes expert guidance in planning lighting layouts for maximum efficiency, flexibility, and economy. Why not discuss your lighting problems with a Silv-A-King engineer? *And send for the complete Silv-A-King catalog today!*

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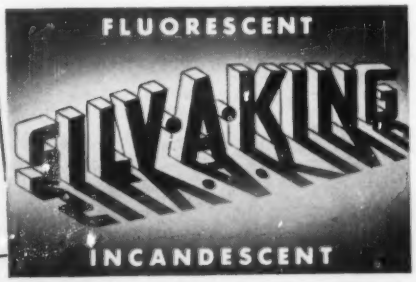
VAPOR-PROOF LIGHTING UNITS
FLOOD AND SPOTLIGHTS



SILV-A-KING MAKES *Light* WORK FOR YOU

REQUIRED READING

(*Continued from page 28*)

But this is more than a beautiful book: it is also, somewhat unexpectedly, perhaps, a lively and entertaining tale. Hector Bolitho has assembled his material with his usual understanding and skill. The writing for the most part is his, and his deft touch is evident throughout; but the narrative is carried wherever possible by Harry Batsford, Charles Fry and other members of the firm, whose first-hand accounts not only add interest and authenticity to the record, but contribute a pleasing variety of style and diction.

"A Batsford Century" is one of those rare books which to see is immediately to desire, and to read is to remember.

A NEW METHOD FOR MEASURING THE QUALITY OF URBAN HOUSING

A Technic of the Committee on the Hygiene of Housing. Reprinted from American Journal of Public Health, Vol. 33, No. 6, June, 1943. 12 pp. 6¾ by 9¾ in. illus.

"The dramatic slums of any community are likely to be well known in a general way, but this is not enough. Effective programs of control (or postwar rehousing on the scale generally anticipated) will require closer definition and measurement of substandard housing than is possible with present appraisal methods." Hence the measuring method here presented.

The key to this method is a system of numerical scores: a rating scale providing penalties for various housing deficiencies, ranging from 1 to 30 points. Forms are provided for data collection, and scoring is done in the office from the completed schedules. Thus the enumerator only reports conditions he finds, without complicating his work and his attitude by the assignment of ratings.

PERIODICAL LITERATURE

NEW SCHOOLS FOR WAR AND POSTWAR NEEDS

By Robert C. Kaestner. Architect and Engineer, San Francisco (68 Post St.) Nov. 1943, pp. 12-18. illus.

With the tremendous migration of war workers, school accommodations in a number of defense areas are, as this article points out, proving wholly inadequate. "From an economic standpoint, type, method and time of construction are important factors, not only in initial cost but in war life of the structure . . . The school building must be at least 95 per cent salvageable," Mr. Kaestner maintains. "Critical conditions and times are now forcing upon us, through necessity,

(*Continued on page 116*)

REPUTATION IN THE MAKING

THE CRUCIAL new year holds promise of decisive action on the European fronts, and strategic progress in the Pacific. Winning the war, and the peace, are the first concern of every American. But 1944 also holds great promise for continued architectural progress and growth—for more definite projects to be designed, for some lifting of building material restrictions, for strengthening the profession's position in the building field and for establishing its value in the public mind.

◆ Architects and engineers acquitted themselves well in their many new tasks imposed by war. Having made the adjustments, they have performed with credit to themselves and have made distinct contributions to every branch of the war effort they have served. In the armed services, especially the technical branches, they have won recognition from their associates and commanders for their adaptability, their keen analysis, and their direct or ingenious solutions to the problems presented. Their training and practical experience, their method of attack, stood them in good stead in dealing with situations normally outside their ken. The profession as a whole gained stature and respect, because as individuals they proved the value of their abilities and services. Though deprived of much of their normal field of endeavor (and sometime entitled "engineers") architects in practice also contributed much to the war production plant and to the housing of every conceivable war activity.

◆ Architects in their new roles "sold themselves" to their new associates, their new "clients," in and out of the armed forces. This emphasizes the fact that, no matter where he is or what he is doing, the architect is being judged by all with whom he comes in contact. And the layman (the public) judges the character and competence of the whole profession by the particular individuals whom he knows or hears about from his friends. Since the reputation of the profession is the aggregate of these impressions of individual architects and engineers, the profession registered a net gain in '43, even if not nominally engaged in "architecture."

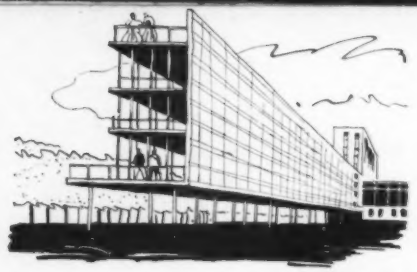
◆ In 1944, many architects will be readjusting themselves more and more to the needs of peace, to the planning of buildings and of communities. The postwar era, for which we must all make our plans more definite in 1944, will provide an unprecedented opportunity for building reputations. It offers a chance to mitigate the public's misconceptions, and to add to the factual record of achievement in solving building problems directly, simply, economically, speedily, cooperatively, efficiently, imaginatively—and with distinction (that elusive quality of building design that comes only through the architect's sensitiveness to form as the visual expression of coordinated functions).

◆ The making of such a reputation speedily depends on just two things—first deserving it—and second deliberately spreading the word to the public, especially that most important part of the public—the prospective client. In both phases, ARCHITECTURAL RECORD proposes in 1944 to continue its policy of rendering service to the profession. In addition to reporting the most significant current news, thought, opinion, action and technical advance through the year, an effective practical program of enhancing the position of the profession in the eyes of the prospective client has been worked out for 1944.

◆ Believing in the ability, competence, and growing responsibilities of the architect and engineer, the ARCHITECTURAL RECORD proceeds to do its part in bringing about a better understanding of the functions of the professions, and the practical and economic value of their services.

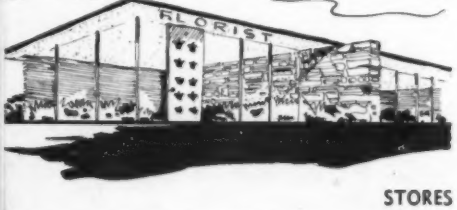
Kenneth K. Stowell

EDITOR-IN-CHIEF



HOSPITALS

HOTELS



STORES

FACTORIES

SCHOOLS

OFFICE BUILDINGS

COLLABORATION

Paralleling that major essential collaboration between architect and client, the* ARCHITECTURAL RECORD *inaugurates a unique collaborative series of Building Types Studies for 1944—each month joining forces with a leading magazine which serves a specific owner-manager group. These studies aim to promote the* planning now *of actual buildings, to demonstrate to owner audiences the value of architect-engineer services, and to give both owner and designer practical ideas and information about each type of postwar building.

ONE of the promising predictions for 1944 is that postwar planning will increasingly pass from the general to the specific

Imaginative sketching of the better city for the brave new world, the ideal community for the masses, is all to the good, but when the V-Day sirens blow there will be a clamor for more tangible blueprints. The immediate goal for 1944 is the largest possible shelf of working drawings, ready for quick use.

Building plans prepared in advance will make it possible for the building industry quickly to provide employment and investment opportunities, will aid in coordination of public and private planning, and will assure to prospective owners better building values.

Architects and engineers have a special obligation to "sell" the plan-now-for-V-Day idea. As the first point of contact with the prospective owner-client, the architect has the assign-

Readers are invited to join in the RECORD'S indoctrination efforts. There are, of course, many other means of persuasion available to architects and engineers, and the situation warrants intensive gospel-spreading. Write to the RECORD editors about your own efforts to get planning started, of ideas that

WHERE IT COUNTS

ment of convincing him that now is the time to get his postwar intentions down on tracing paper.

For its own share in this indoctrination campaign, ARCHITECTURAL RECORD begins in this issue a series of collaborative editorial programs designed to sell as well as inform. It has arranged with several other business magazines to join editorial staffs in BUILDING TYPES STUDIES for V-Day buildings, to appear simultaneously in the RECORD and an owner-read magazine each month. And thus to spread the gospel of specific planning now, not just to architects and engineers, but also to their clients.

More directly, the program has three objectives:

1. To stimulate planning of building projects *now*, for construction as soon as materials are released.

2. To give the prospective owner-client a visual demonstration of the contribution the architect and engineer can make to the utility and amenity values of his building—the over-all soundness of his investment.

3. To give to designers essential new information on the owner's requirements, and on his ideas for changes and improvements developed in the wartime interim.

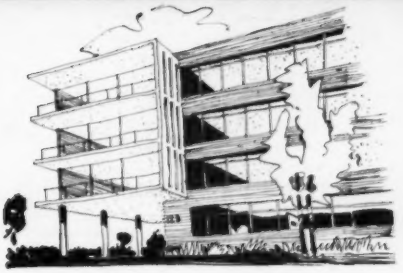
Each month in 1944 there will be a different collaborating magazine, each a leader in the owner-manager field for the building type in question. Each month a new editorial staff will combine with the RECORD editors, pooling information, ideas and sources toward effective delineation of the postwar assignment.

This month the topic is HOTELS, published jointly with *Hotel Management*. For February, GAS STATIONS and other highway buildings, with *National Petroleum News*. March: SCHOOLS, with *Nation's Schools*. April: THEATERS, with *Motion Picture Herald*.

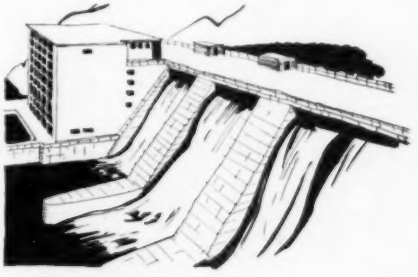
Choice of subject types of buildings, and therefore of collaborating magazine, is on the basis of frequency with which these types appear in Dodge V-Day Reports, indicating both the maximum opportunities both for architect-engineer services and for resulting employment and investment.

As each month the get-an-architect-busy-on-your-project message goes to a new audience, by the end of 1944 it will have reached prospective building owners and managers in a dozen different fields.

have proved effective, or even of any thoughts in the category of something-should-be-done-about-it. And tell what you can of specific V-Day projects on your boards; published renderings and plans will further the demonstration of the practicability of planning now, for an audience of prospective owners



APARTMENTS



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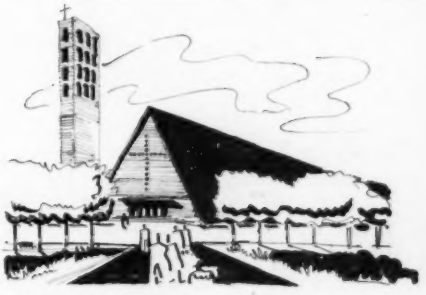

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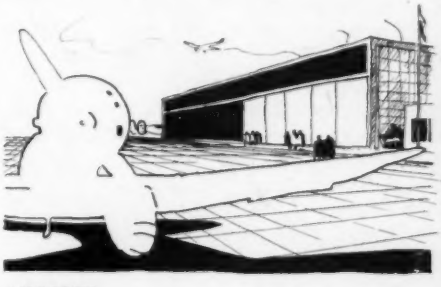

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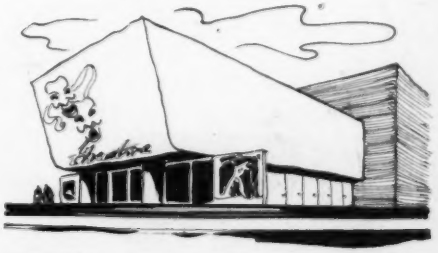


THEATERS

Sketches Francis X. Gina

HIGHWAY BUILDINGS

HOTELS

ARCHITECTURAL RECORD'S BUILDING TYPES STUDY NO. 85

PLANNING NOW FOR POSTWAR PATRONS

By James S. Warren

Editor, Hotel Management

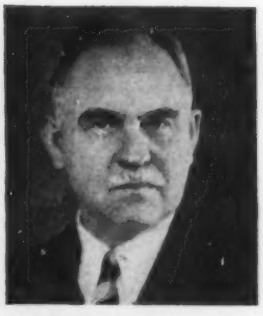
In spite of the fact that hotel men have necessarily been preoccupied with problems of manpower shortage and food rationing, they are thinking seriously of their postwar programs and of the changes which they will make in their present hotels, or new ones to be built. They realize that in the highly competitive postwar period it will be important to improve their hotels to attract more guests, to obtain additional revenue-producing areas, and to make such changes as will insure lower operating and maintenance cost and thus greater profits. They realize too that more will be necessary than just a repainting and refurbishing job if these three things are to be accomplished.

It is surprising how much can be done in these directions without great capital outlays. The imagination, ingenuity, and the "know-how" of the skilled architect are invaluable in bringing existing hotels back into the catagory of up-to-date, revenue-producing investments, with the least possible expenditure. This might seem a mere assertion were it not for the fact that a long list of such achievements speak for themselves.

As a demonstration of what can be done, the Architectural Record and *Hotel Management* magazines have worked with an owner and the manager of an actual hotel, and have engaged Francis Keally, architect, to make a thorough analysis of the possibilities for modernization. As consultant on various engineering aspects, Mr. Sullivan A. S. Patorno has made specific recommendations in collaboration with the architect and the management. Mr. A. Ward Hendrickson has given many valuable suggestions regarding the lighting problem. This group, working with the editors of the magazines, have thus produced a down-to-earth and thoroughly practical study of what can be done with one hotel, as a demonstration of the possibilities and practicability of applying the same technique to any hotel.

We believe that the approach and the concrete suggestions presented in this study will serve as a guide and inspiration for many similar studies to be undertaken by the owners and managers of many hotels throughout the country, in collaboration with the architects and engineers of their own choosing.

The time to undertake such studies is *now*, for the hotel that is ready with its modernization plans, and its blueprints on the shelf, will be in the best competitive position as soon as restrictions on building are removed. Such restrictions may be lifted sooner than many expect. We commend to both owner and designer the careful consideration of the principles and suggestions presented here.



ARCHITECT
Francis Keally, A.I.A.

ENGINEER
Sullivan A. S. Patorno

MANAGER
E. T. Moran

LESSEE
Bruce E. Anderson

REVITALIZE FOR V-DAY REVENUE

Hotel modernizing principles and practice as exemplified by the proposed remodeling of the Wenonah Hotel, Bay City, Michigan

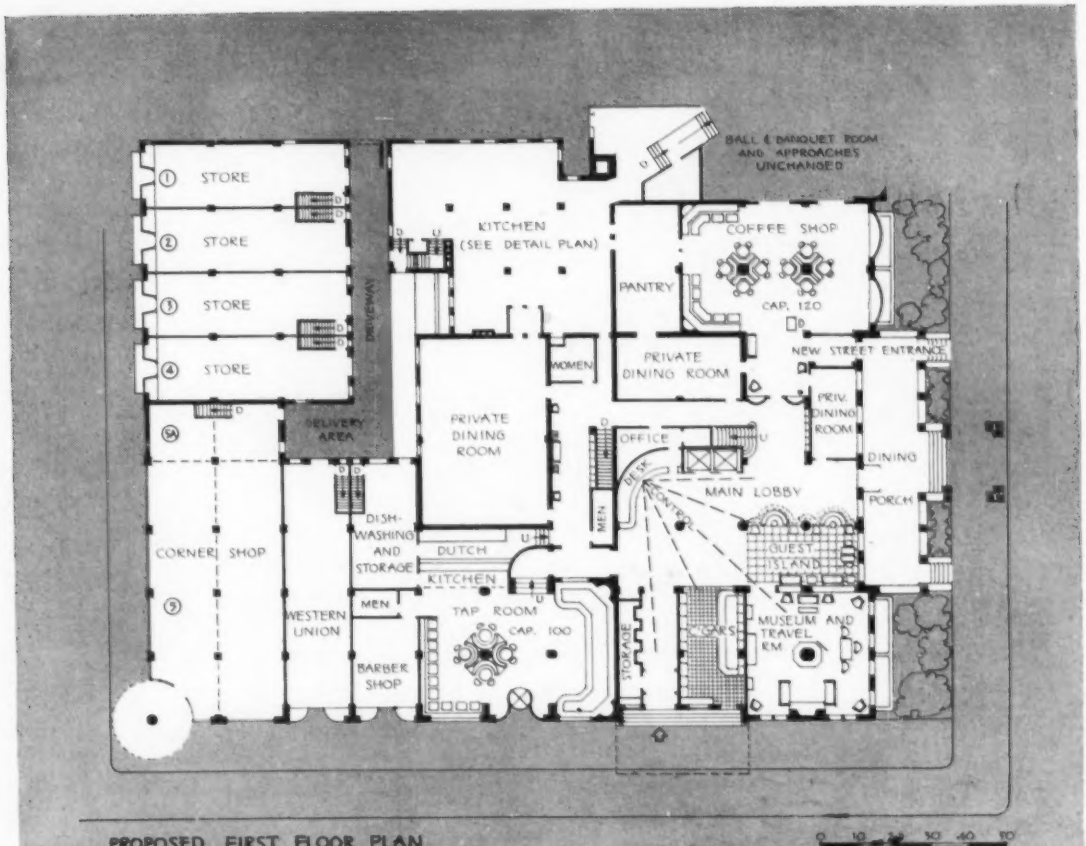
by Francis Keally, A.I.A. • Renderings by Floyd Yewell

In this demonstration of the principles and possibilities of hotel modernization, we are not trying to show how to save a derelict. We are trying to find what could be done to turn a good existing hotel of the present into a better hotel of the future. We are out to bring forth the Rip van Winkle hotel dollars that may have gone to sleep gently and unnoticed. Taking the Wenonah as an example, we can perhaps show in concrete form the *kind* of changes that could be made in other more or less similar hotels to increase their earning power and improve their postwar competitive situation.

In choosing the Wenonah at Bay City, Michigan, as a hotel on which to try out ideas of modernization, we did not mean to imply that the Wenonah is anything but a good hotel today. In fact, it is very good, and this suited our purpose all the better. Anyone can take an old wreck and improve it considerably just by making it stand up and shed water. But in so doing he would not necessarily demonstrate what sort of changes are needed to put an older hotel ahead of the game in point of earnings.

The Wenonah is of fireproof construction, built mainly in 1907, with brick outer walls and with concrete floors supported on steel. It is sound and well maintained in every way. There are 200 guest rooms of which 180 are rentable; there are 57 rooms with tub bath, 20 with combination bath and shower, 3 with shower stalls, and a number of rooms with private toilet but no bath. Bay City, in which the Wenonah stands, is a thriving shipbuilding center of about 50,000 population, with a promising future in building lake carriers after the war is over.

The Wenonah is typical of thousands of hotels in thriving medium-sized American cities. It would be called a commercial hotel, except that there is just enough resort character in the town and in the house to permit us to suggest certain details of treatment that will increase revenues from people coming to the hotel on trips for pleasure. This is because Bay City lies at the beginning of the Michigan hunting and fishing trails leading to the


BALL & BANQUET ROOM AND APPROACHES UNCHANGED
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② STORE
③ STORE
④ STORE
⑤A
⑨
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WESTERN UNION
BARBER SHOP
DRIVEWAY
DELIVERY AREA
KITCHEN (SEE DETAIL PLAN)
PANTRY
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CAP. 120
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GUEST ISLAND
DISH-WASHING AND STORAGE
DUTCH KITCHEN
MEN
TAP ROOM
CAP. 100
STORAGE
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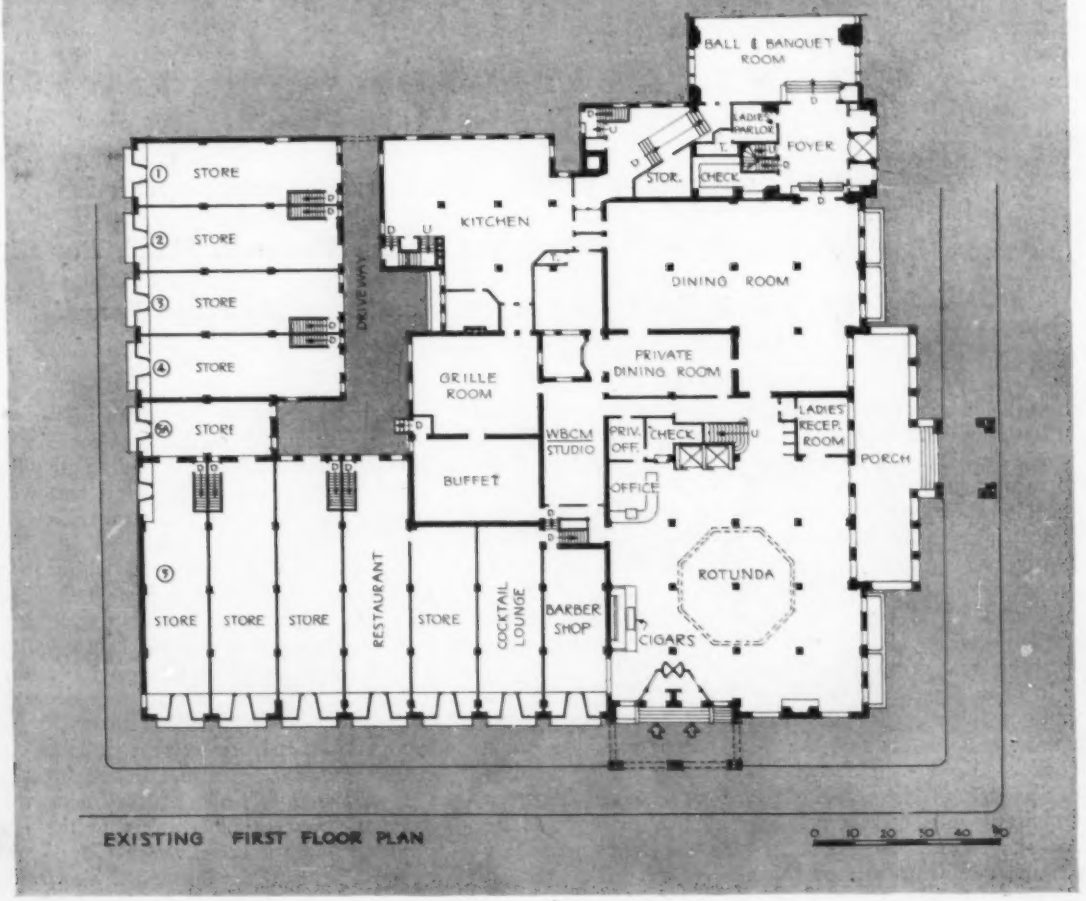
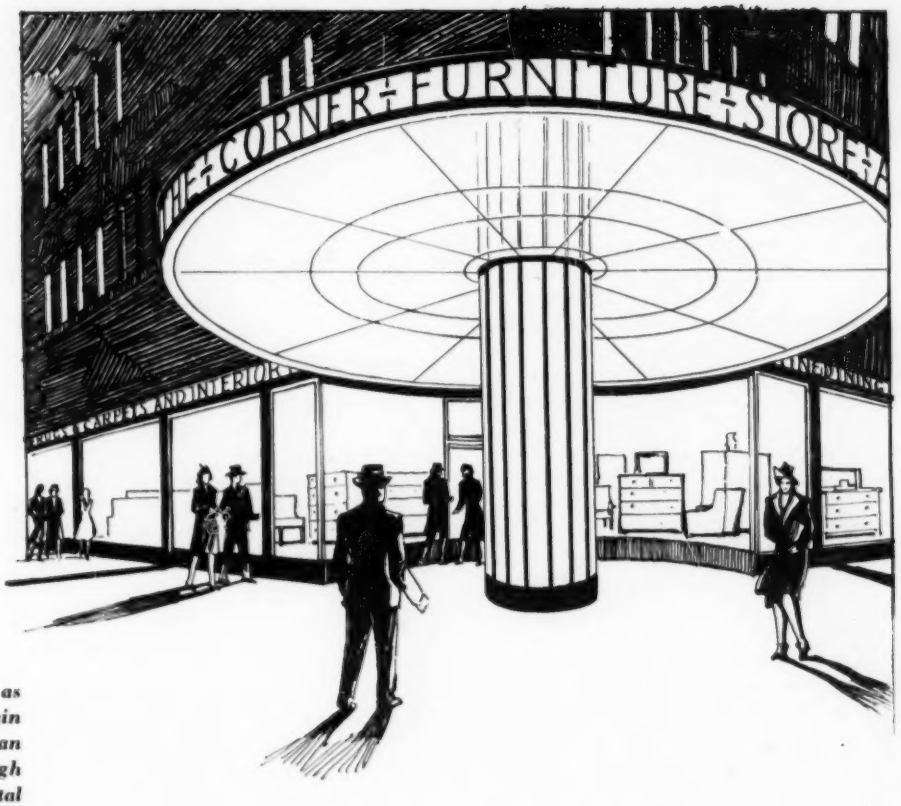
MUSEUM AND TRAVEL RM
PROPOSED FIRST FLOOR PLAN
0 10 20 30 40 50


BALL & BANQUET ROOM
LADIES PARLOR
FOYER
STOR.
CHECK
① STORE
② STORE
③ STORE
④ STORE
⑤A STORE
⑨ STORE STORE STORE
DRIVE WAY
KITCHEN
DINING ROOM
PRIVATE DINING ROOM
GRILLE ROOM
WBCM STUDIO
PRIV. OFF.
CHECK
LADIES' RECEP. ROOM
PORCH
BUFFET
OFFICE
RESTAURANT
STORE
COCKTAIL LOUNGE
BARBER SHOP
ROTUNDA
CIGARS
EXISTING FIRST FLOOR PLAN
0 10 20 30 40 50



An architectural feature such as this canopy, in sight of the main business corner of the town, can create a store site strong enough to absorb the existing low-rental side-street stores at a far higher rental applying to the whole area

north; and if one comes into the hotel as I did on an October day, a highly picturesque scene greets the eye, of the innumerable hunters and their dogs. Then again, Bay City has a lake-cooled summer climate, and the situation of the hotel facing with one side to a park makes it ideal for vacationers. Yet neither hunters nor vacationers could ever by themselves furnish the necessary backbone of revenue that comes from the standby, the commercial traveler. In renovating, we never lose sight of him.

Entrances. Let's start with the entrances. The Wenonah has two of them, one from a main business street, one from the park. The business entrance, on Center Street, is encumbered now by areaways. We propose to take them out. Let's give the cigar man half of the new, greater width we have gained by eliminating areaways. He now has an entrance from the street as well as one from the lobby, and on top of that, he is in position to get business from visitors to a new projected hotel museum, of which more later. Round windows permit glancing into the cigar store from the foyer; balancing these, we have put louvers on the other side of the passage. These can be rented to local merchants for display. Cigar store rentals under the proposed conditions can be increased.

On the park side of the hotel, we get two new entrances to the porch, and one new direct entrance to the modernized coffee shop. There is always a presumption of greater earning power in entrances direct from the street outside, in addition to entrances from that inner street called the lobby.

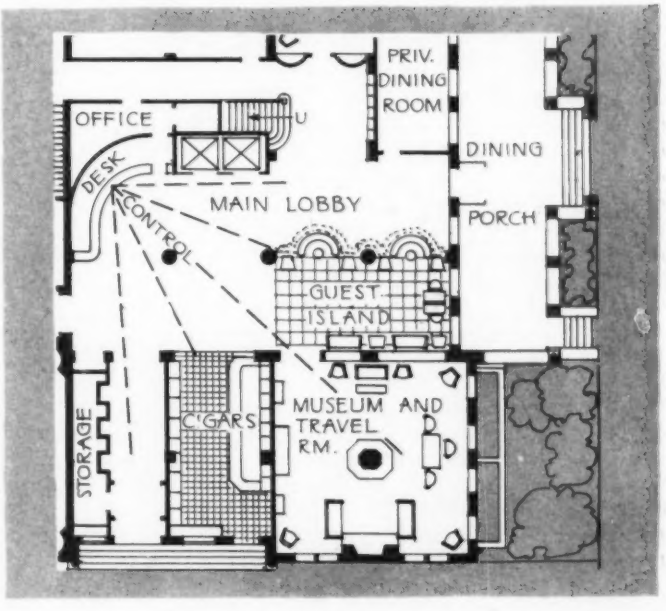
Stores. Like many a hotel, the Wenonah rents a fair share of its ground floor to stores, at varying rentals. The southwest corner of the hotel is only about 200 ft. from

the main business center of the town. Here is a chance not to be missed. At the corner, a strong architectural feature could attract attention and create an excellent site. We propose a round canopy, as shown in the drawing above. With fluorescent lighting at the periphery and a mirror on the underside, this canopy can make all the difference between a poor site and a good one. Assuming success of the store, we can count on its expanding, in plan, from spaces 5 and 6 (as a starter) and absorbing 5a, 4, 3, 2, and even 1. Note that these locations now have very little value individually because they are on a side street. Joined together as parts of one large store, all benefit from the one front feature, and the rental value goes up for all.

There are other parts of its rental areas in which the hotel might profit more by furnishing the requisite services itself. We shall come to these, in the case of the Wenonah, when we deal with food and drink facilities.

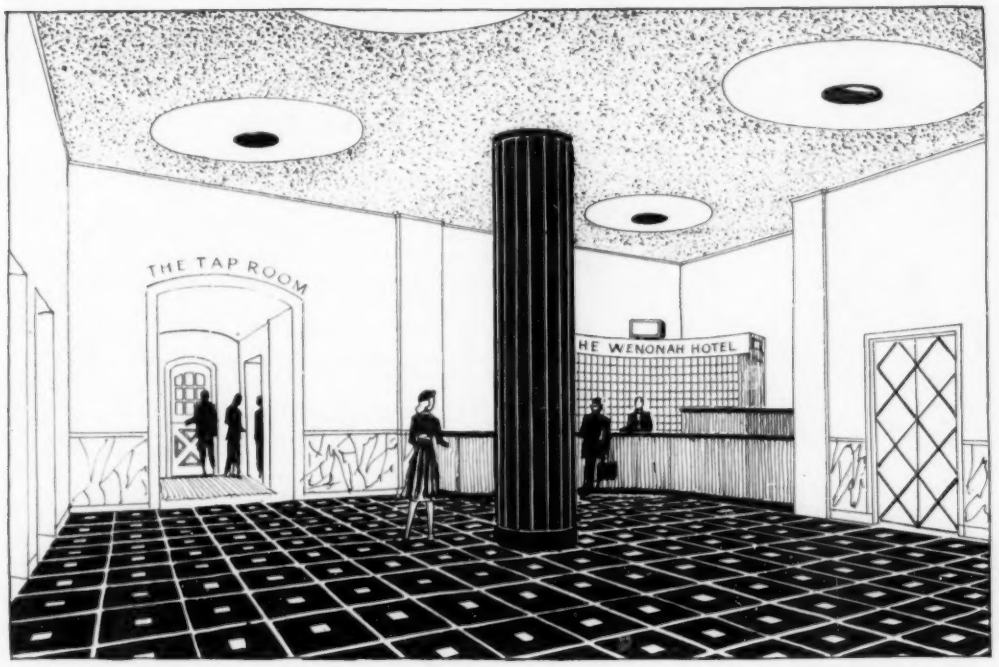
Desk and Off-Lobby Rooms. Let us follow the guest from the entrance into the lobby. He first heads for the desk. The desk is as important to a hotel as the bridge is to a ship. It is here that the guest transacts his first business and absorbs his first impression. It is from here, as from the bridge, that the manifold activities of the lobby are supervised by the desk men. At the Wenonah we find a perfectly acceptable desk, but it simply juts out into the room, and a column stands within two feet of the angle. Let's streamline the desk as the picture shows. At once it is more inviting, clears the column with space to spare, and assures clear sight lines into the lobby as a whole.

In a hotel lobby it is important that all facilities be within quick reach and be easily seen. At the Wenonah today, the desk men can see the lounge area, but cannot see the taproom. In the proposed plan, although arrangements are more complicated, the desk man can see all around the circle: coffee shop entrance, park doorways, guest island, hotel museum, cigar stand, main street entrance, and, by means of a mirror attached to a column, the picture window of the taproom. The same factor of visibility makes it easy for guests to find their way around the lobby.



Illustrations: Top, existing desk, which merely juts into the room; center, proposed plan for the main lobby area, showing easy sight-lines; bottom, existing coffee-shop entrance which would benefit by "store front" to the lobby

Entrances to hotel facilities that lie just off the lobby should be distinctive. Vanished are the days in which the Wenonah was built, when guest patronage of the dining room was taken for granted and charged in the inclusive price. In those days the hotel dining room sought to emulate a superior home, and needed only a door with a sign. In the kind of hotel that has been developing, the dining facilities must promote themselves, and stand on their own. They no longer try to suggest "home" but something at once cheerful and efficient. A very successful treatment for this purpose is the Colonial Inn. We have let the Wenonah coffee shop project itself into the lobby, in this character, by means of the Colonial window flanking the entrance, and the recessed cubbyspace for hats and coats let into an adjoining wall.



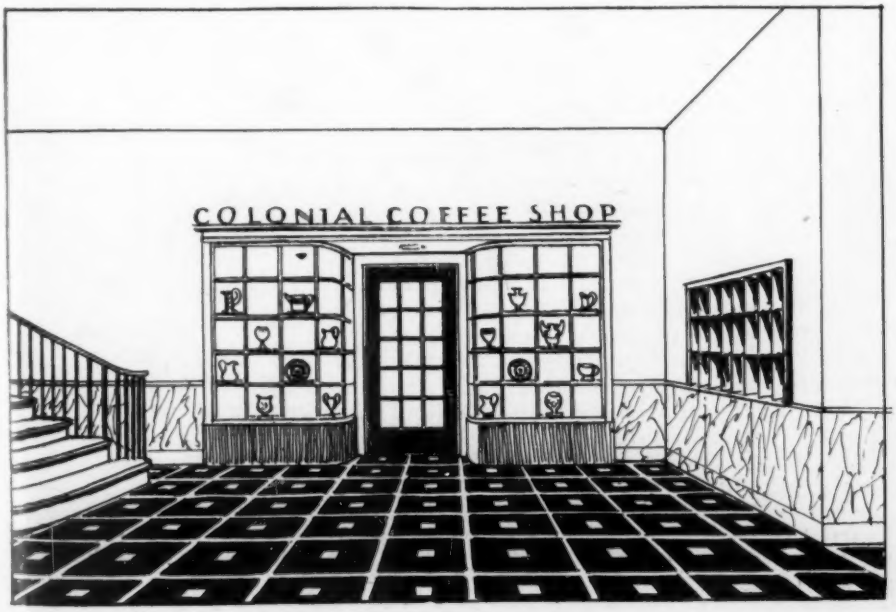
The new desk is concave in plan with "low skyline" room rack

Most hotel lobbies in structures built some years ago are too big for today. They involve undue expense for carpeting, painting, furnishing, and, above all, cleaning and heating. Here at the Wenonah is a generous lobby. The original architect has made it even more spacious and interesting in composition by cutting an octagonal opening through the mezzanine.

Our first step will be to close over this opening. This will instantly prevent the heat from being lost into the upper part as fast it it is furnished, will prevent possible drafts, and will cut down the fuel bill very considerably.

Closing over the mezzanine instantly gives us new rentable space above. The Wenonah has an available tenant in the radio station WBCM, which now occupies space next to the kitchen on the ground floor.

For economy we shall leave the present beamed ceiling untouched, and simply drop a new flat ceiling underneath it. The space between gives us enough room for the handsome domed lights that are shown in the rendering. A single bulb under these domed reflectors suffices to illuminate a wide area, and the combined effect of all the domes is to provide the most agreeable even lighting.



This treatment instantly identifies the coffee shop entrance in dignified manner for guests and the compartments serve to store wraps, with no attendant necessary

Lobby and Guest Island. Next, let's subdivide the big floor area. We shall start by boldly cutting off the whole corner. What we shall do with it can be told just a little farther on. But the first effect of cutting off the corner is obviously to give us a smaller, more manageable lobby.

In this lobby, we shall no longer endeavor to keep the character of one big, undivided room. After allowing for plenty of width in the necessary passageways to the desk from both the main street entrance and the park entrances, we shall start fixing up a "guest island" of more intimate scale and agreeable nature than the former big lobby. This "guest island" is separated from the traffic line in the lobby, and is protected from drafts, by a breast-height partition which is topped, as the picture shows (the upper view across page) by artificial flowers. These are changed with the seasons and contribute an air of cheer that is greatly to be desired.

The guest island contains lounge chairs and alcove benches, for those engaging in conversation, and it contains the writing desks which have been moved down from the mezzanine. Writing facilities in most older hotels are excessive; guests now-a-days tend to do their writing in their rooms. By moving out the writing desks from the mezzanine into the guest island we have added rental space above and stirred up some more income.

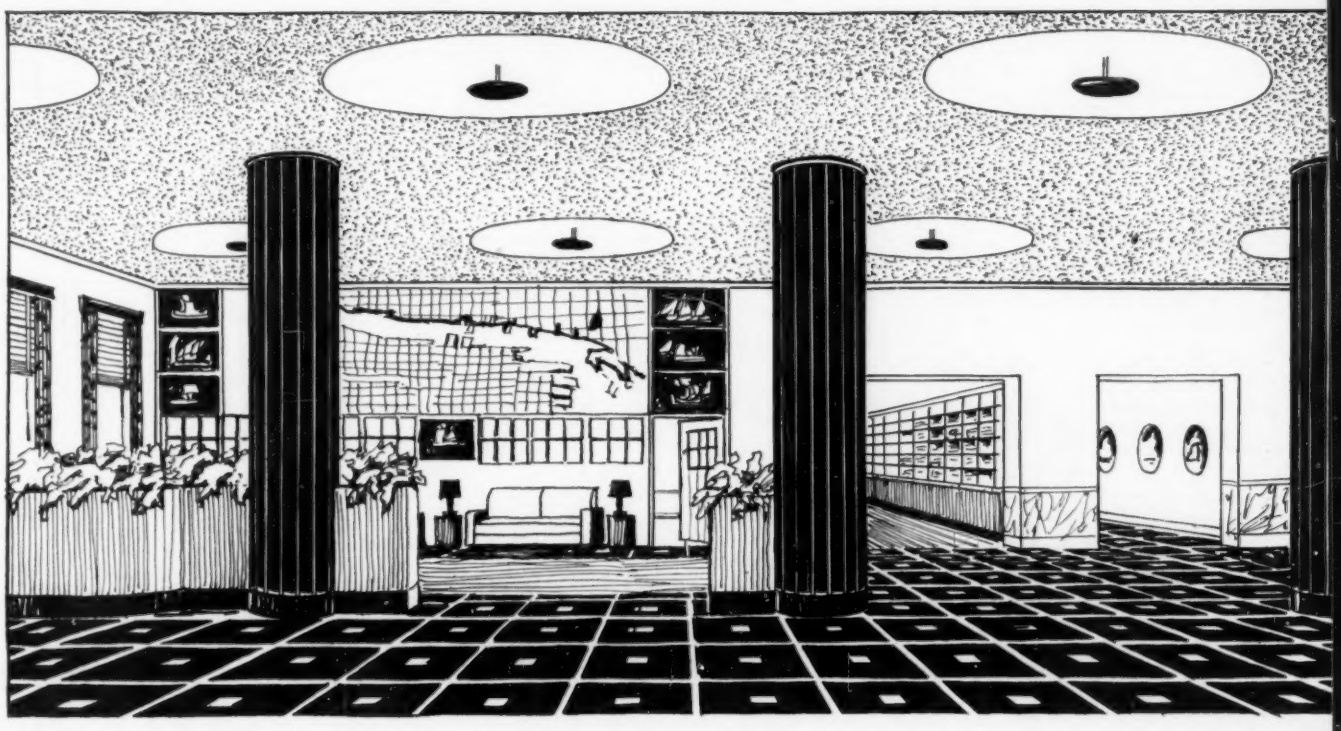
A mezzanine, such as the one in the Wenonah, shown at the right, is the kind of a space that was once highly prized for the "tone" that it gave to the lobby. Today, supervision is so much more difficult to obtain over semi-isolated areas, that the trend in the smaller houses is toward complete conversion of mezzanines, for rental

A hotel museum and travel bureau is what we plan to arrange in the new corner we have gained. This decision is reached on the basis of added revenues to be earned. Ordinarily, a souvenir shop might be thought of as an appropriate concession for the available space. But we want to see whether we cannot endow the area with a greater ultimate potential. To the sale of souvenirs and the travel service we intend to add other attractions.

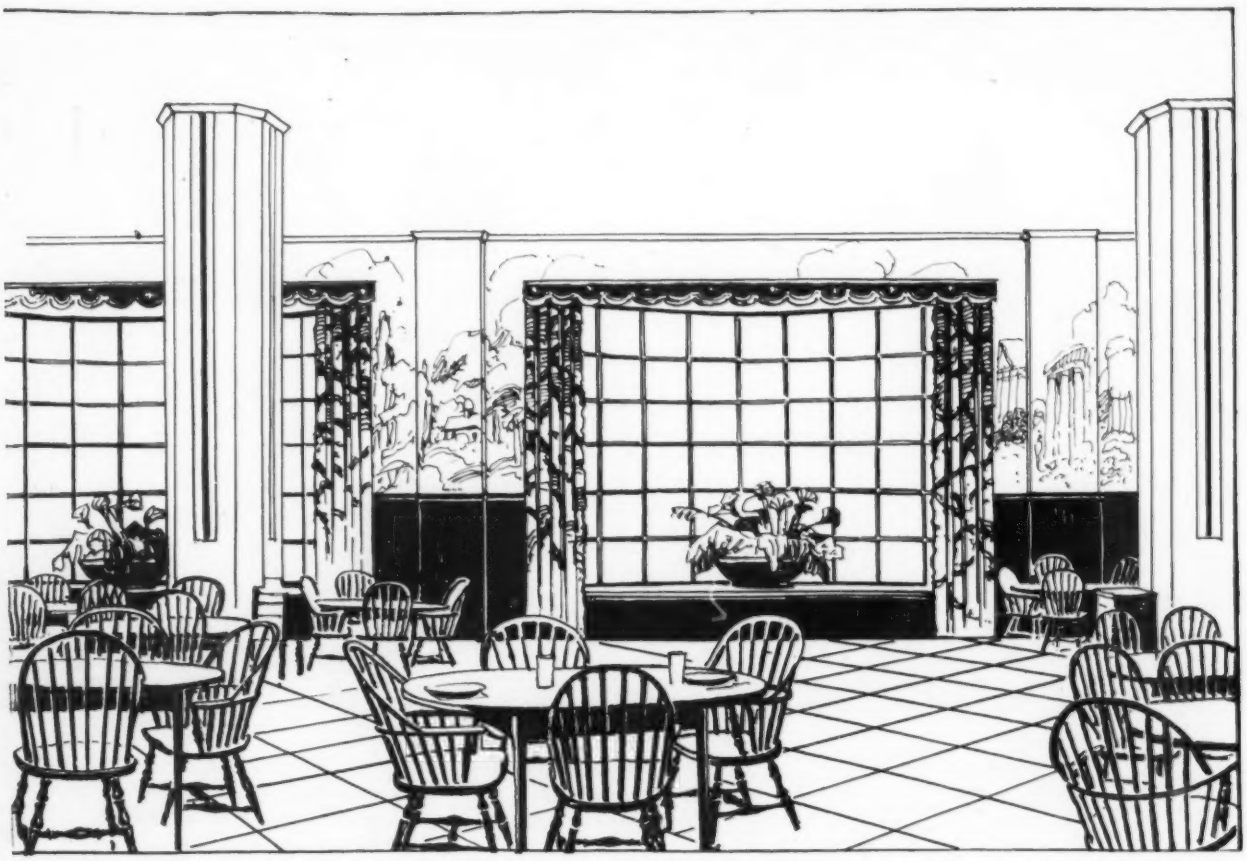
Michigan, we have said, is great hunting and fishing country; and if we make the proper kind of a display, we can draw into the hotel large numbers of people in addition to the guests. Let's draw them with the kind of a display from which they will be unable to stay away: historical equipment such as guns, rods, boats, canoes, sports costume, decoys flies; mounted specimens of game, fish, and fowl; everything to appeal to the sportsman.

In order that the setting may be in keeping with the material displayed, let's give the room an early Michigan character, with big log beams supporting the ceiling and with wood finish for all the walls. The region is now devoted to pulpwood rather than big lumber, but timber is still a subject of talk for the oldtimers.

The museum is in direct view from the desk. It has no outside entrance; people have to come past the cigar store or at any rate into the lobby to enjoy and use it. As a direct dividend to the hotel, we can put the travel service here, amid surroundings that suggest travel purchases, instead of installing it at a mere lobby desk. The big wall map of Michigan aids the attendant in giving travel directions.



Above is a view of the proposed lobby, with emphasis on the "guest island;" the cigar store and entrance passage are seen to the right. The "guest island" is supplied with lounging furniture and alcoves, and with the writing desks brought down from the converted mezzanine. Here is the appropriate place for the map of the city, to be studied at greater leisure than would be possible if it were placed over the busy desk. Windows into the travel bureau-museum stir the curiosity of the guests. The museum is shown below, in its "old Michigan" timbered character. The map is an aid to the travel guide for the hotel, who also garners revenue as a salesman for souvenirs



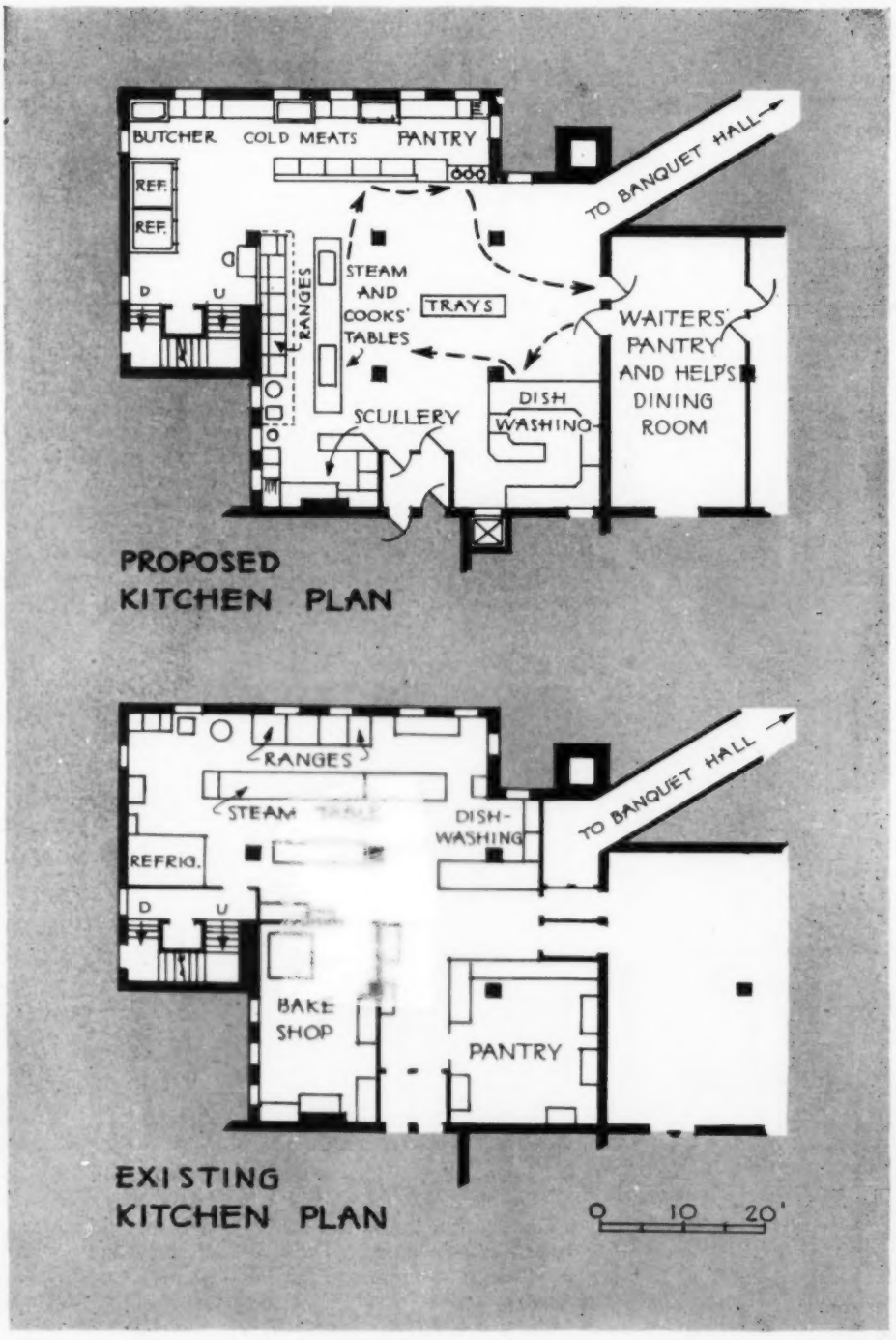
Above: Bowed windows open the proposed coffee shop to the park. Alternate seating arrangement makes use of banquettes. (See plan). Lighting in columns. Existing coffee room to right

Eating and drinking facilities in the Wenonah as it stands comprise no fewer than six separate units. Starting at the top of the first-floor plan, there is the big ballroom, 35 by 100 feet, which extends out in a wing reserved, of course, for special occasions as indicated on the plan. Then there is the coffee shop, and the main hotel dining room. There is the "Drydock" bar, which opens about two o'clock in the afternoon. Finally, there is the restaurant, in among the stores, rented to an outside proprietor. All these can be changed to advantage.

The coffee shop is the unit we might start with. (The ballroom may well stay as it is.) We have made a drawing of the proposed changes, to contrast with the present character as shown in the photograph. In speaking of its entrance, we have already remarked that a hotel coffee shop must attract its own customers today. For a greater air of intimacy, we may replace the free-standing tables with banquettes, arranged about the columns. These columns are furred out to an octagonal shape, and contain the low-key fluorescent lighting. Also, we have replaced the double-hung windows opening toward the park with large, cheerful, Colonial bays that frame the fine view in a far more cheerful and striking manner, and greatly improve the character of the entire room. The ventilation now provided by the double-hung sash may in future be provided by air conditioning.

The garden room, at the interior of the hotel, can remain virtually unchanged as the more formal dining room for more formal, leisurely patronage.

The proposed taproom is designed to produce considerable added revenue for the hotel. This kind of a facility is indicated wherever there is a chance to combine service to hotel patrons with service to business-men of the town. At present this service is split up, and the revenue from business-men's lunches is collected by the restaurant to which the hotel merely leases space. The hotel bar, in the meantime, is open only afternoons and evenings, earning only part of the revenue possible from its location.



Hotel kitchens should be analyzed like an industrial plant. The proposed plan for the Wenonah shows the routing of the waiters, at higher efficiency. The existing pantry is questionably placed and wastes space. More ample dishwashing space can be provided, and the bakery can be moved downstairs. Help's dining room should be cheerfully furnished for better relations with employees of the hotel

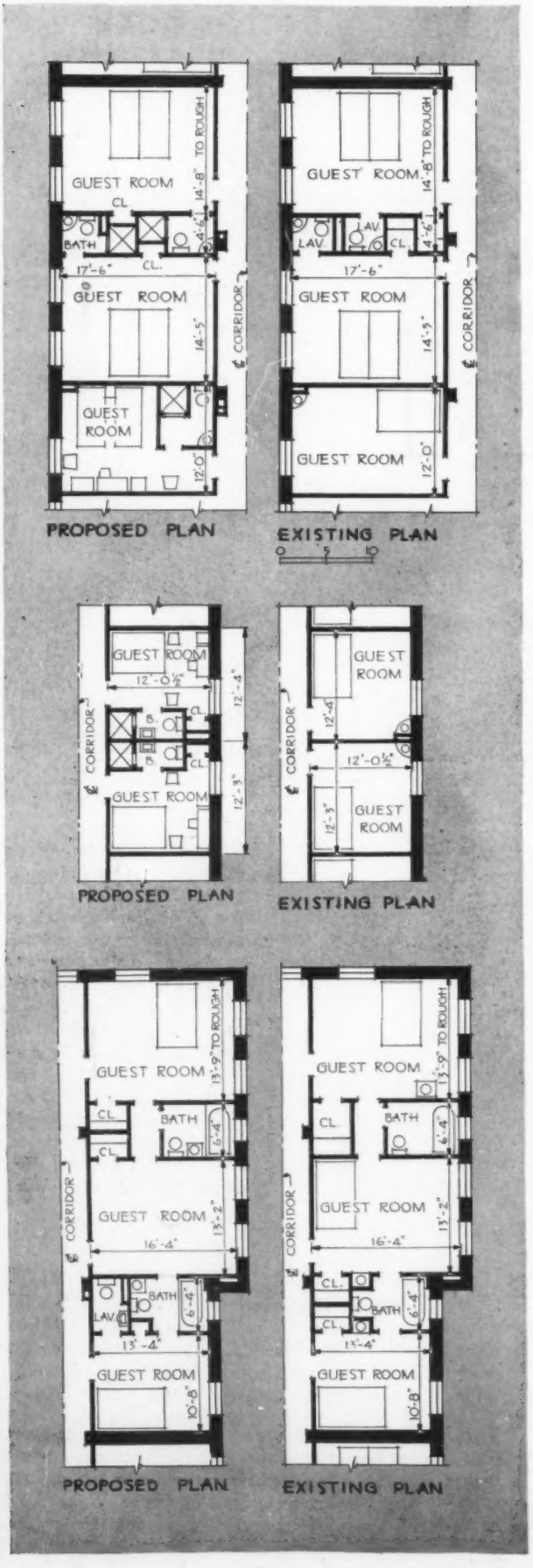
In such cases the hotel should obviously look for a way of combining the two services with profit to itself. We have found the requisite space by moving the big barber shop into a smaller and more appropriate area. This barber shop is a carry-over from the days when every guest was shaved by a barber every morning. It does not justify itself where it is. The new place and size of the shop are fitted to its present-day smaller operations. (See lobby plan.)

The U-shaped bar of the proposed taproom is well suited to structural conditions, requiring no changes.

The Dutch kitchen feature projects the idea of a quick hot lunch out through the show window to the sidewalk.

In many a hotel besides the Wenonah, patrons would appreciate a toilet in close proximity to the bar, and would be thankful for simplified steps to meet their more illuminated but less sure-footed moments.

The kitchen arrangement is one which a hotel man can grasp by viewing the plans. We propose moving the bakery down to the basement, shifting the ranges, and arranging a dishwashing pantry more in keeping with modern "flow-line" service. The kitchen has access to the coffee shop, banquet room, garden, and taproom.



The hotel guest room ought to have a new name. By no means should it ever be referred to as a "bedroom." The trend is toward the kind of guest facility that can be used in the daytime. Calling it a "studio" room would not be just right, but in future hotels perhaps 75 per cent of the beds will be "studio" beds that make up into couches in the daytime, so that business conferences and social activities can be carried on in the guest rooms.

Smaller guest-room storage space is a second strong contemporary trend. It has been found that the traveller today "lives out of his suitcase." In general, closets built in an early day are excessive. With a little ingenuity, space can be borrowed from them and used for the more elaborate toilet and sanitary requirements of the present time. Private toilets are preferred today by even those guests who are content without a private bath or shower.

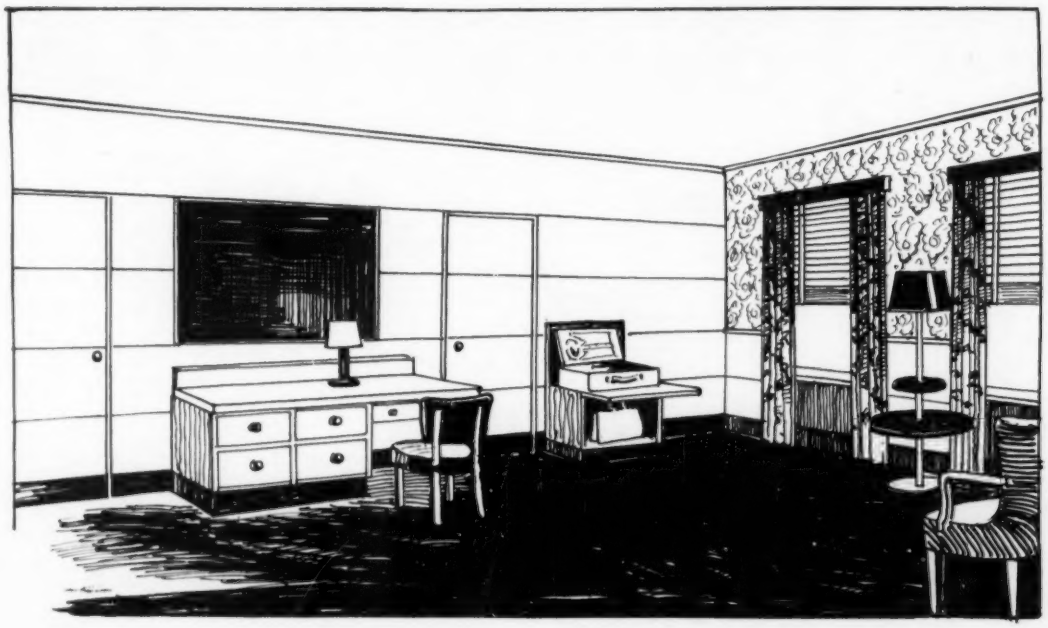
Interpreting these three trends, toward (1) daytime use of the guest room, (2) less storage space, (3) more toilet and sanitary facilities, we have illustrated average hotel possibilities by means of three sets of rooms at the Wenonah.

Perhaps the most striking kind of change is the one made between rooms 380 and 382, in the group of three rooms shown in plan at top left. Each guest is furnished

a new shower, and in each case the lavatories are removed from the room proper. The shallower closets are perfectly adequate to our times. Here may be noted a rearrangement of toilets, closets, and shower stalls in a staggered pattern, worthy of closer study. In the bottom room, space has been found for a toilet, lavatory, and shower stall cut into one corner.

Taking the pair of rooms shown at the center, we encounter another typical opportunity for the hotel renovator. Here again we resort to smaller scale: not of closets this time but of furniture. By putting in new pieces of smaller, more intimate scale, we gain a new shower stall for each room. Doors are moved a little to make way; beds are turned the long way of the room; the former open lavatory in the corner is replaced by a new closet.

In the bottom group of three rooms, we begin by cutting in half the old deep closet between the top pair, so as to yield shallower but ample closets for *both* rooms. In this way we release the existing middle closet for use in the bottom room as new toilet space. In this room the former lavatory alcove yields an ample closet.



Guest room looking toward "chiffo-desk" and new type luggage rack

Guest room furniture. In the drawings of hotel guest rooms we have indicated something of the character of up-to-date furniture and finish. So far as ruggedness is concerned, the guest rooms of a transient hotel should be "pullmanized" so that the guest is not made uncomfortable at the thought that slight carelessness on his part may injure the room or make tell-tale marks on it. For this purpose, a high wainscot of wood or tough wallboard is useful. Wallpaper, if it is used, should be washable. Paint is cheaper to maintain; see "Reminders for Hotel Planning."

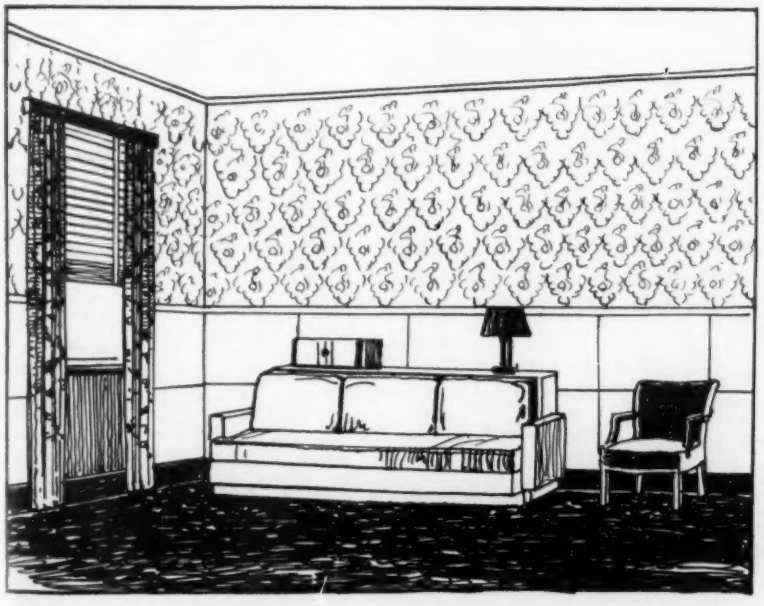
"Studio beds" such as that shown in the drawing are made now in pleasant designs and with workable devices, making up into a "living-room" couch in the daytime.

A "chiffo-desk" furnishes the guest with any needed extra storage drawers; it could be used with or without an adjacent wardrobe so designed as to fit and harmonize.

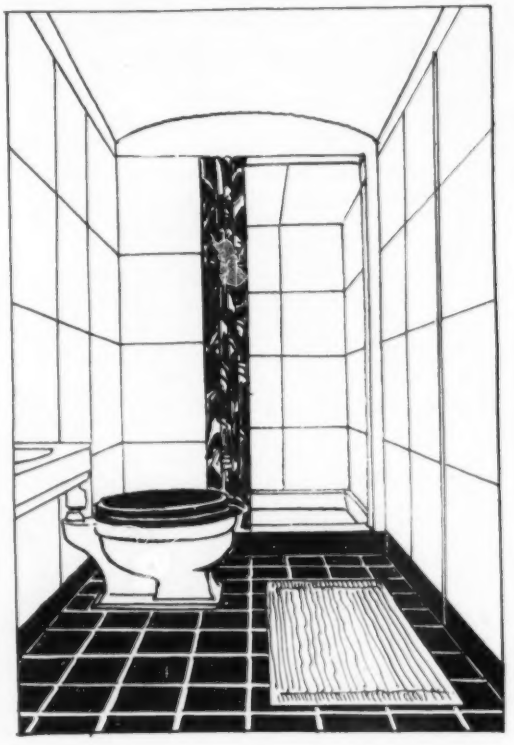
The luggage rack has not yet received the attention it deserves. Since the guest, as we have said, lives mainly out of his suitcase, he should not have to bend over. The high rack in the drawing is so designed as to protect the wall, and is wide enough so that a Gladstone bag may be opened in the usual way across the top.

We have indicated a combination reading lamp and cocktail table for sociable occasions, the table being duly protected, of course, by alcohol resistant plastic finish.

The lighting of the guest room is of great importance in establishing a pleasant mood. The old-fashioned central chandelier or rosette of several bulbs is no longer acceptable as the main source of light. It is better to let the bridge



Left: Convertible studio bed in guest room being used as day couch. Note the high wainscot. "So far as ruggedness is concerned, the guest rooms of a transient hotel should be 'pullmanized' to make the guest easy in his mind." Across-page are shown the existing beds, unsuited to daytime use



At right, existing lavatory, tub, and large closet arrangement that lends itself especially well to renovation. Below, proposed bathroom and proposed room with shower. Note especially how old tubs may be given up-to-date appearance by a skirting with a high base-mold. Head of mirror contains trough-light serving the entire room

light, or some one stand lamp, be connected to the switch at the door, and otherwise let the guest choose his own local lighting. This will "seem more like home." Lights by the beds for night reading must be taken for granted. A large number of plugs will take care of other requirements.

For other room suggestions, see supplementary remarks entitled "Reminders for Hotel Planning."

Lavatories and Bath Rooms

The old tubs on high legs, such as one finds in countless hotels (including the Wenonah) are still perfectly useful although out of style. It is possible to make them very attractive modern looking simply by supplying them with a new surrounding base and skirting of some hard, waterproof, marbleized wall board. The finished effect is illustrated in our drawing.

Shower stalls are growing in favor, as a compromise between more expensive bathing arrangements and none at all. We have proposed introducing many shower stalls in our modernization, and a second drawing illustrates the possibility of making them attractive.

Lavatories which were considered an unavoidable element of the older hotel "bedroom," replacing the familiar old water pitcher and bowl, must all be moved out of the up-to-date guest room that is to be used as a private day room and lounge. We have shown all lavatories as of the pedestal type.

Stopper and chain are recommended by many hotel men under prevailing conditions, because they are low in cost and offer a positive way of handling water. There is no guest who cannot master their operation.

Toilets chosen for our proposed modernization are of the flush valve type, which is less space consuming, less open to tinkering by guests, and more economical in maintenance.

Floors and wall finish are dealt with more extensively under "Reminders for Hotel Planning."

MODERNIZING THE HOTEL EQUIPMENT

*By Sullivan A. S. Patorno**

In many hotels that were built ten to forty years ago, it is now generally found necessary to add some special rooms, and eliminate or rearrange others, to meet the changes of the town and new requirements of its people and visitors. This will increase patronage and eliminate the risk of local competition. The hotel considered in this article is typical of many others all over the country. By modernization it can meet present day needs and remain commercially successful.

The sensible approach to the hotel problem involves the owner, architect and engineer in considering all parts of the hotel to determine whether:

(1) Any of the existing equipment is unnecessary.
(2) Any essential existing equipment is not functioning properly.
(3) Any existing equipment can be operated more economically.
(4) Switching to other fuels or changing the generation of electricity to public utility purchase or vice versa, will create savings.
(5) The addition of air conditioning or improvement in the heating, ventilating, plumbing, electric, and elevator equipment will result in greater comfort for the guest, with increase in patronage and receipts.

In relation to point (3) above, the author knows of buildings in New York that have recently sold old engines, now useless to them, at prices close to the original purchase price, and have thereby gained valuable space for storage.

A Check-List of Possible Changes

We have generally found the following check list useful in indicating when improvements for greater comfort, elimination of hazards, lower maintenance cost, can be made with satisfactory financial returns:

(1) Are special rooms, such as taproom, grille, dining room, ballroom and lobby, comfortable in terms of heating, ventilation, smoke, odors, and drafts?
(2) Will the addition of air conditioning to such rooms as taproom, coffee shop, or grille room, increase patronage with worthwhile returns?
(3) Are there any uncomfortable draft conditions in the lobby, entrances, or special rooms with large windows?
(4) Are there objectionable kitchen odors or other odors in any of the rooms throughout the hotel?
(5) If bathroom lavatory faucets and bathtub faucets have china handles, then metal or plastic handles will eliminate hazard, and modernize.
(6) If towel bars and bathroom grip bars are of glass, then replacement with metal or plastics will eliminate hazard, and modernize.
(7) If bathroom lighting fixture is of the old-fashioned metal type without receptacle, then replacement with porcelain bracket fixture, containing receptacle, will eliminate electric shock hazard, and will economically provide essential receptacles for such appliances as electric razors or curling irons.
(8) Will addition of shower head to bath tubs increase demand for such rooms and permit charging a higher rate? In some cases hotels have obtained 50 cents more for rooms after installing such showers.
(9) Where common bathroom is used for two bedrooms, will addition of another bathroom make investment worth while?
(10) If a central ceiling lighting fixture with 2 or 3 bulbs exists in bedrooms, it should be replaced with a single-bulb rosette, to reduce maintenance cost.
(11) If old-fashioned lighting bracket exists over dressing table or writing desk, it should be replaced with receptacle into which table or floor lamp plug can be inserted. This is more modern and convenient.
(12) If windows in bedrooms and bathrooms are not weatherstripped, where drafty conditions and cold rooms prevail, then weatherstripping should be added.
(13) If top floor rooms are uncomfortably cold, then roof insulation should be added.
(14) Can fuel in use be replaced with lower-cost fuel or with fuel adapted to labor-saving devices which will effect savings in operating cost?
(15) The introduction of zone control for the heating system, where practicable, may produce worth while savings for the investment involved and prevent overheating or underheating.
(16) If electricity is generated in the hotel, will it be more economical to purchase current from local public utility? Conversely, if current is purchased would it be cheaper for the hotel to generate its own? If soft coal is used, will it be more economical to use other available fuels, such as oil, gas, or anthracite coal, if operating costs are lower? Additional savings could be obtained through lower upkeep cost for finishes and fabrics.
(17) If top-floor hung ceiling space is ventilated by gravity ventilators, then dampers should be added in ventilators, so that they may be shut off in winter, to save fuel and materially reduce drafty conditions in rooms throughout the building.

In relation to point (17) above, it has occurred in our experience that a hotel several stories in height had no fewer than nine large gravity ventilators above a hung ceiling in space under the roof. In winter, the heat differential was naturally increased, and the suction created by these ventilators was enormous. Even when windows were closed, a great deal of infiltration of cold air occurred throughout the hotel. By the simple expedient of providing dampers, a very sizable saving of fuel was effected, along with considerable increase in comfort for the guests.

(18) It may be possible to avoid operating certain exhaust fans during the winter, if it is found that the flue action is great enough to provide satisfactory exhaust ventilation.

If any of the conditions mentioned in the outline are

* *Office of Sullivan A. S. Patorno, Consulting Engineers, New York.*

unsatisfactorily met at present, then modernization and improvements are needed to retain and increase patronage and make a corresponding investment return.

The more important modernization proposals for the Wenonah include the rearrangement of the kitchen equipment, the refurnishing of the present boiler room, converting the existing cocktail lounge and bar into a new taproom, converting the west end of the first floor into a new corner store, and adding a new laundry. The redesigned kitchen will be provided with modern, labor-saving equipment; will be well lighted, to reduce hazard to a minimum; and will be adequately ventilated to prevent odors from reaching other rooms. The ballroom will be provided with effective complete ventilation and independent smoke exhaust, which thoroughly eliminates the objectionable heavy, dense smoke generally created by large convention gatherings and social functions. When the smoke is eliminated, the air becomes clear, remains fresh, and gives a feeling of comfort throughout the time the room is used. The lobby will be provided with smoke exhaust to clear the air during periods of peak population gatherings, and with surplus fresh air to overcome objectionable cold, chilly drafts coming through the doors whenever they are opened in the winter. The present coffee shop will be provided with sufficient ventilation. Air conditioning will be installed, if upon thorough study it is found that the investment will pay returns in the form of cash receipts. The new corner store will be provided with economical ventilation meeting the requirements of the store function. The new taproom will be air conditioned and provided with smoke exhaust.

Where new inside bathrooms are being added, the piping and ventilating ducts to serve them will be run at the ceiling of the floor below. Raising the bathroom floor for concealing pipes is more costly, and a hazard. In any event, the ventilating ducts have to be run at the ceilings; therefore it is simpler and more economical to place the piping with the ducts and to provide a hung ceiling for both. There are many advantages in having inside bathrooms in place of outside ones with windows. Inside rooms do away with drafty conditions in cold weather, with window and wall condensation, with window draperies, and dust. Inside bathrooms also insure more privacy, feel more comfortable in cold weather, when heat is off, and are more effectively ventilated than outside bathrooms because the windows are kept closed in cold or inclement weather.

REMINDERS FOR HOTEL PLANNING

By Francis Keally, A.I.A.

Lobby and Public Areas

Windows and Doors: weatherstrip all of them. Window draperies must be of types simple and easy to handle. Laws will probably soon require fireproof types of draperies, either (a) glass, or (b) plastic, or (c) a mixture of fibre-glass and asbestos.

Carpets: In the lobby, the carpet gets terrific wear and tear, especially in smaller towns with less well kept streets. Must withstand sulphuric acid, dirt, dust, grease, impact of countless feet. The recommended type is an uncut Wilton which has a wool base, is well tufted, with high pile, strong construction.

Lobby carpets must be turned periodically. This means that the shape of the lobby areas should preferably be symmetrical. The standard carpet width is 27 in., and widths therefore should be multiples of this dimension.

In corridors, also, carpets should be to standard size, for frequent turning, and reach from wall to wall.

In the bar, carpets are used more and more to attract the feminine customer in addition to the masculine. The carpet helps with the acoustics, keeps the tone of the room soft and quiet. It is brought to within 3 to 4 ft. of the bar, no closer, so as to avoid staining.

Upholstery. The best materials are those with a wool base, such as mohair or other woolen fabrics. The next choice, more economical to purchase, is hard cotton combined with linen. For minimum upkeep no upholstery material except leather should be placed on chair arms.

Elevators

Automatic elevators are coming increasingly into favor in hotels with only two or three guest-room floors. The bell-boy gives instruction in their operation on the first trip. Too small an elevator will create congestion in the lobby at elevator doors. Non-slip sills at the elevator corridor must not be forgotten.

Metal guards inside elevators, to a 3-ft. height, increase life-span of the car by furnishing protection against baggage. They can be decoratively designed.

Carpeting the floor of an elevator is a friendly gesture on the part of the hotel. The elevator is, after all, a vertically moving section of the lobby.

Pushbuttons at each landing should have ample escutcheon plates to save the wall. They can be made of alternating designs, in plate glass, mica, marlite, linoleum, or rubber tile, in various shapes and colors.

Guest Rooms

Studio beds will be found in perhaps 50 to 75 per cent of future hotel guest rooms.

The size of a good single hotel bed is 3 ft. 3 in. by 6 ft. 4 in.; of a good double bed, 4 ft. 4 in. by 6 ft. 4 in.

A full double bed is preferable to a "three-quarter" bed where there is only one bed in a room.

All beds should be easily moved, on carriers with large rubber wheels or casters.

Guest room floors should be carpeted to the wall. Closet floors should be brought up level with top of room carpet and be uncarpeted themselves.

In hotels charging the highest tariffs, one of the best types of guest room carpet is a Wilton, with a small figure. This retains the proper scale and suffers minimal damage if things are spilled or dropped on it. In hotels charging a medium rate, the velvet type of carpet is often considered a good investment.

Walls may be painted or covered with wallpaper. Wall-

(*Continued on page 69*)

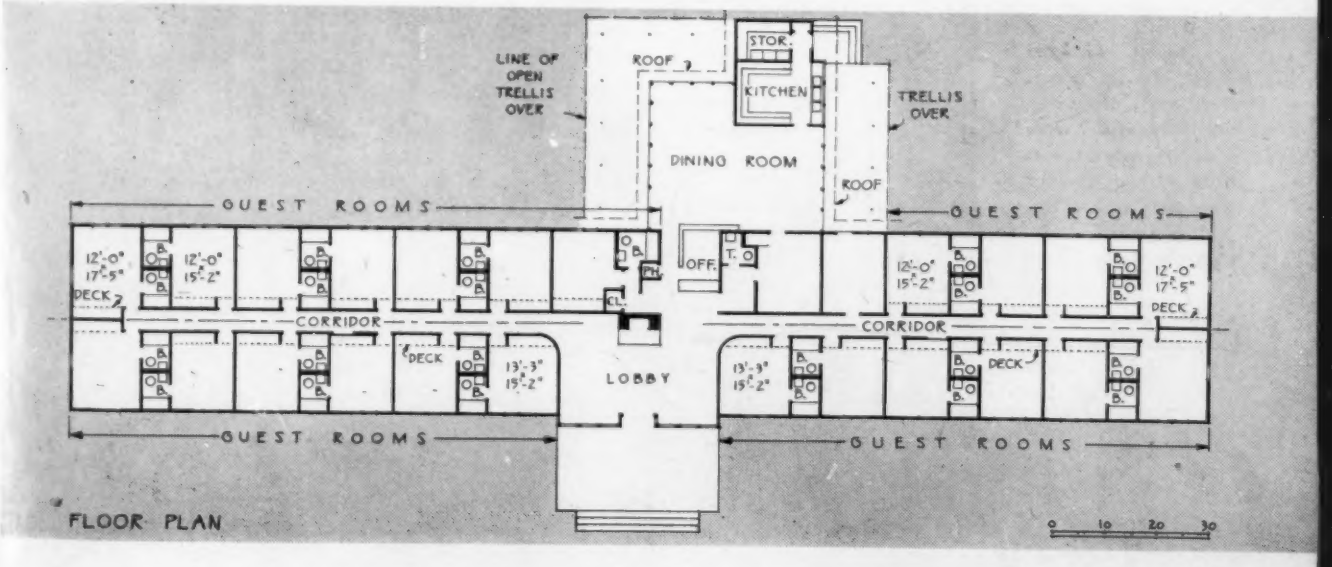
A ONE-STORY HOTEL FOR A TEXAS TOWN

Dow Hotel, for Dow Chemical Company, Freeport, Texas

Alden B. Dow, Architect

The wide-spread plan of this hotel is explained by its open situation. The main building, erected in 1940, is said to have been completed in two weeks' time; the dining room wing was added later. The speed was due in part to the use of "dry-wall" methods of construction. The exterior walls and roof are covered with white asbestos shingle. The wood-frame structure lends itself easily to changes when needed.

A feature of the plan is that the public rooms open into one another informally, on principles familiar in private residence planning, but hitherto not so familiar in hotels.



Above, lounge; right, dining room. Note open planning, acoustic ceiling with flush fluorescent light fixtures; boxed windows and dropped ceilings as design vocabulary

paper must be washable. If walls are painted, renewal every three to three and a half years permits six washings. Light pastel colors are to be used with caution; wherever contact with the wall is likely a darker color is advisable.
Windows of guest rooms should preferably be weather-stripped. Draperies should be simple and easy to handle; avoid light pastel colors if easy maintenance is desired. The materials should be painted wools or printed cotton, never glazed fabrics that cannot be washed.
Doors. The pin tumbler type of lock is highly recommended; a bolt on the inside of the door is advisable.
Lighting fixtures are treated in separate notes on hotel lighting below.
Furniture in guest rooms should be scaled down to domestic size.

A high luggage rack is advisable, so that the traveller, who usually "lives out of his suitcase," need not bend every time he needs some personal requisite. The rack must be designed to protect the wall, and to permit opening the Gladstone type of bag across its top.

A "chiffo-desk" combines drawer space for storage with provision for necessary writing. A standard wardrobe should be designed to stand alongside the desk, in cases when closet space may be a little tight.

Glass or plastic tops are needed on existing cabinet- type furniture or table-tops to protect against stain, alcohol, and fire. New furniture should be specified with tops covered by integral plastic or lacquer finish that has the same protective characteristics.
Equipment. A radio will be standard equipment in almost every future hotel guest room. A telephone belongs, of course, near the bed.

An electric clock, if possible with alarm attachment, will greatly please patrons.

Bathrooms

Make hotel bathrooms as small as possible.

Interior bathrooms are easier to ventilate and keep clean. Existing tubs lend themselves to further use where a base or skirting is supplied of marbleized board or tile.

Ceramic floors are still very highly recommended. Nailing strips should not be forgotten in concrete floors. They can be wood or synthetic material.

Wainscot of minimal 3 ft. 5 5/16-in. height should surround all bathrooms. Above this height Keene cement protected by good oil paint is usually satisfactory.

A dark gray stripe painted above the tile wainscot in bathrooms makes a neat juncture.

The radiator cabinet should be out of the guest's way. Plumbing pipes should be accessible behind the medicine cabinet.

In placing new bathroom facilities in older buildings, it is important that furring be done at the ceiling below, instead of raising the floor to provide the necessary pipe room. Furring is both more economical and convenient. Of course, it requires vertical alignment of bathroom areas from floor to floor.

Paper towel dispensers help save maintenance in linen. They can be used in supplementary fashion.

Toilets with flush valve are recommended, and the pedestal type of lavatory. Stopper and chain for all fixtures is low in first cost, positive in operation, and inexpensive in maintenance.

Miscellaneous

Storage. Linen closets, slop sinks, laundry chute, rubbish incinerator should not be forgotten. Maids' carts should have a garage—8 carts in the Wenonah serve 129 rooms.
Basement contains mechanical plant and equipment; storeroom with electric lift; help's lockers and toilets; public toilets for men; elevator and machinery equipment. Allow for any special provisions. For example, in the hotel under consideration, well soundproofed kennels in the basement would be a welcome feature in the season when numerous hunters bring along their dogs.
Kitchen floor may be covered with quarry tile. Help's dining room should be well ventilated and nicely finished to raise help morale. In the *basement*, all corridors should have a baseboard 4 to 6 in. high. All *cold water pipes* should be covered to prevent condensation, especially where soilage is possible, for example, in the laundry where condensation may discolor flatwork.

TRENDS IN HOTEL LIGHTING

By A. Ward Hendrickson

THE SUBJECT of the lighting of a hotel cannot be exhausted in terms of foot-candles or wattages. Except in the areas devoted strictly to staff work, we are definitely working not toward a scientific standard so much as psychological effect. Light is, so to speak, another instrument in the architect's hand, a color for his palette.

The lobby, for example, is the first space in the hotel that is entered by the incoming guest, and it is important that the lobby instantly make him feel both welcome and comfortable. The highest possible overall intensity would not achieve this effect. A medium level of intensity, without undue contrasts in level, will fulfill the purpose better. This medium level can be achieved in a number of ways all of which are architecturally decorative; in the Wenonah example we have chosen domes let into the ceiling, as something both simple and effective.

The medium level of lighting throughout the lobby as a whole permits effective accents for desired spatial effects, and local lighting of higher intensity for reading, achieved by heavy-based stand lamps. The desk should be accented so that the newcomer is led toward it automatically. This can be done by the same downlights that serve the desk men in their work. A good type for this is "pin-lighting" from concealed sources set flush in the ceiling. Concealed spots may be so placed as to accent such features as murals or the large wall maps we have proposed for the Wenonah.

Rooms such as coffee shops or taprooms should be intimate in their lighting; this implies a lower general level.

At the bar it is possible to achieve dramatic effects by back-lighting and top-lighting shelves of bottles. A principle more often honored in the breach than the observance is that the colors, and above all the lighting, in either eating rooms or bars should not spoil the color of the food. This is often quite as important as the glamorizing of the women upon whom patrons have decided to spend their hard-earned money. Lighting altogether too "dramatic" in color may have an effect different from what was intended. It is possible, by virtue of the new fluorescent lights, to mix a wide range of colors, and in future it is expected that fluorescent and incandescent lights may be used together, the ordinary incandescent light being considered by some to be more flattering to women.

Ballroom lighting should be very flexible. It should be possible to select among many different levels of illumination usually controlled by theater dimmers. Combinations may be made employing down lights, cove lights, various forms of trough lights, wall fixtures, lens lights, and even chandeliers. When cove lights are introduced, it should be remembered that access is more difficult for the replacement of bulbs, that coves involve more cleaning, and must be rated at less than full theoretical efficiency because of possible accumulation of dust.

In corridors and secondary areas used by guests, the treatment should be simple. Lighting flush with the ceiling provides a good useful light when there is proper spacing of fixtures to insure even spread.

In large public spaces, tubular lights have decorative possibilities. Fluorescent and "cold cathode" lighting have the advantage that they impose less strain on the air conditioning system by generating less heat to be carried away. Fluorescent lights after the war will appear in other than tubular shapes, and many new shape possibilities are to be expected. One development that has only begun is the kind of light now used in automobile headlights, in which the lens and reflector are an integral part of the light itself, requiring no adjustment to deliver optimum performance.

Guest room lighting is treated in the article on the Wenonah. To recapitulate, elaborate central ceiling lights have given way to floor and table lamps, among which at least one is connected to the switch by the door. The occupant selects his own lighting. An adequate number of convenience outlets is required.

Bathroom lighting has always been a problem for the architect. In Statler Hotel bathrooms there has recently appeared an ingenious medicine cabinet with a cove at the top from which the whole room is illuminated. Also, light is projected on the person using the mirror from two sections of frosted glass so placed as to illuminate the face for shaving or makeup without creating glare in the eyes of the user.

In summary, many an architect has watched a photographer make splendid pictures of an interior by judiciously "painting with light," using light to emphasize some features and subdue others. With less freedom than the photographer but with more than he might think, the architect can modulate and enhance the original, real room by means of the resources of modern lighting.

Hedrich-Blessing Studio

View in a guest room of the new Hotel Statler in Washington (Holabird and Root, architects, A. R. Clas, associate), showing the use of a floor lamp as a principal source of guest room lighting. More flexibility is made possible by this expedient than by the old-fashioned chandelier or large ceiling rosette. Note also, in this view, the clean handling of air-conditioning unit under the window, and pocket above for Venetian blinds

QUICKLY CONVERTED FOR CASUALTIES

How Halloran General Hospital, Staten Island, N. Y., was created by U. S. Corps of Engineers and William Gehron, Architect, who altered and enlarged an almost-completed state hospital

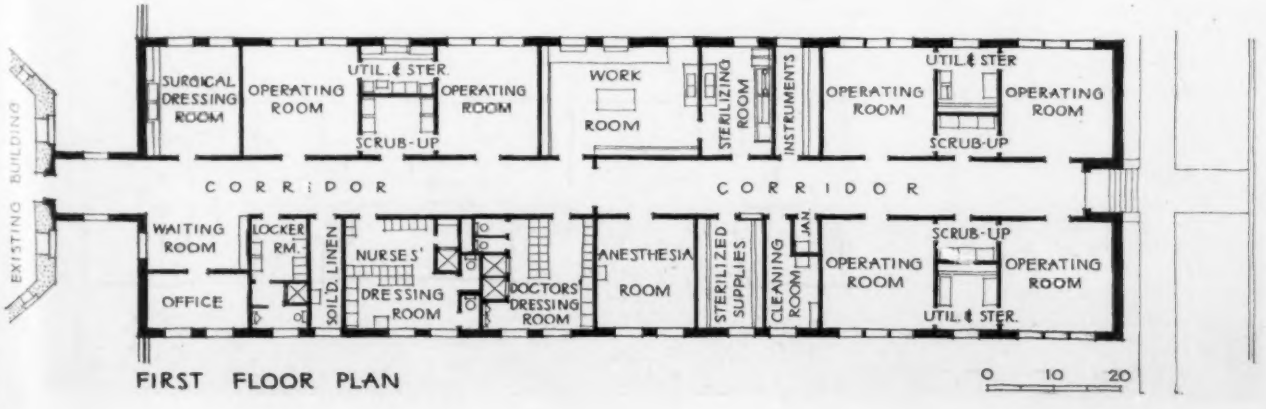
Photos by Barbara Morgan

Main building, designed under direction of William Haugaard, N. Y. State Commissioner of Architecture; one-story surgery wing by William Gehron, Architect. (See plan below)

ARCHITECTURALLY, there are two main strands of interest in Halloran Hospital's history. One relates to the speed and efficiency with which this unusual hospital was made available to the Army. The other relates to the breadth and humanity that governed the conception of building no less than that of medicine. Together these strands make up a story of efficiency not "cold" but warm.

Today Halloran, with 3,000 beds, is one of the largest Army receiving hospitals. Only a few faint traces remain to betray that the largest part of it was once intended as a home for mentally defective children. This Willowbrook School had been designed under supervision of William Haugaard, commissioner of architecture for the State of New York.

At first the aim of the Army was to convert this state institution into a straight Army hospital of 1,500 beds. The U. S. Engineers, and William Gehron, their architect for the conversion, had a manifold task before them. First there were sundry finishing jobs to be done that could still be performed under the state contracts, and involved chiefly painting, furnishing and grading. Then there were thousands of changes to be made in



FIRST FLOOR PLAN

The whole idea of Halloran is humane treatment

the existing buildings. And, finally, new buildings were required, such as a modern surgery wing, and covered walks to connect all possible facilities under roof.

For this whole vast change-over, the architects were given three weeks to prepare the plans. They were compelled, therefore, to evolve measures for extreme efficiency, which bulk large in the story. But no sooner was the original conversion work near completion than a new decision changed Halloran to a receiving hospital, with a redoubled capacity of 3,000 beds. Once more the architects had to sharpen their wits. There were extensive additions to be made, including new clinical buildings, barracks for enlisted men and WAC's, a chapel, post exchange, various recreational facilities and other structures for sundry purposes.

THE HALLORAN IDEA

But no description of the Halloran assignment can leave out the intangibles. The place of such a hospital in the Army scheme of healing and rehabilitation is strategic. Halloran is the first piece of the USA seen by men who have risked their lives abroad. A happy reception here means the world to them. Yet Halloran holds these men no longer than it has to. Home is the place the soldier is heading for, and the Medical Corps uses all expedition to get all the men who can be moved back to hospitals near home, where they van be visited by relatives and friends. Only those stay on at Halloran who cannot be moved. And for them a cheerful atmosphere is indispensable.

Wisely, therefore, Colonel Ralph G. DeVoe as commanding officer and the medical officers of his staff have paid attention to more than medicine alone. Not only is Halloran a great medical plant equipped with every facility for medical, psychological and surgical healing, but it is equipped to serve other social needs, whether of religion, education, sociability, or entertainment. The hospital is virtually a town that has its own power plant, fire station, shops and gasoline depots for maintenance; its facilities for receiving, storing, processing and serving vast quantities of food; its depots for clothing and necessary supplies; its tailor shops and storage space for the men's belongings; and, beyond this, the chapel, library, craft shops, outdoor theater, motion picture auditoriums, dance floor, bowling alleys and playing fields. Then there is the heart of the institution, the "PX" or post exchange, where the men talk to the chain-drinking of cokes, or have a meal with visitors, or buy tobacco, magazines and writing supplies for themselves, or perhaps jewelry, gadgets and perfume for sisters and sweethearts. Quarters are provided not only for patients but for staff, including nurses and WAC's. There are even stables for the horses of a mounted corps of military police guards.

On any visit to Halloran, the mingling of uniforms makes a colorful impression: there are the maroon robes of the convalescents, the olive drab uniforms of the staff, green coveralls worn not only by men on fatigue but by working WAC's, the white or blue uniforms of the nurses and the veils of the "gray ladies." Still more striking is the mingling of people, the attitude of easy comradeship on the job of all kinds, races, and creeds of Americans.

ARCHITECTURE, BUT QUICK

Technically, we have said, Halloran posed a problem not only of comprehensiveness but speed. So pressing were the demands that a system for handling thousands of changes swiftly became more important than any one change in itself. This was especially true of the first installment, with its strong element of converting existing facilities. The exact number of changes could never be counted but they ran to several thousand. Information had to be given and taken "on the run," with reliance on good judgment of all concerned.

To clarify matters, the revised designs were governed by two basic check lists. One was the list of existing

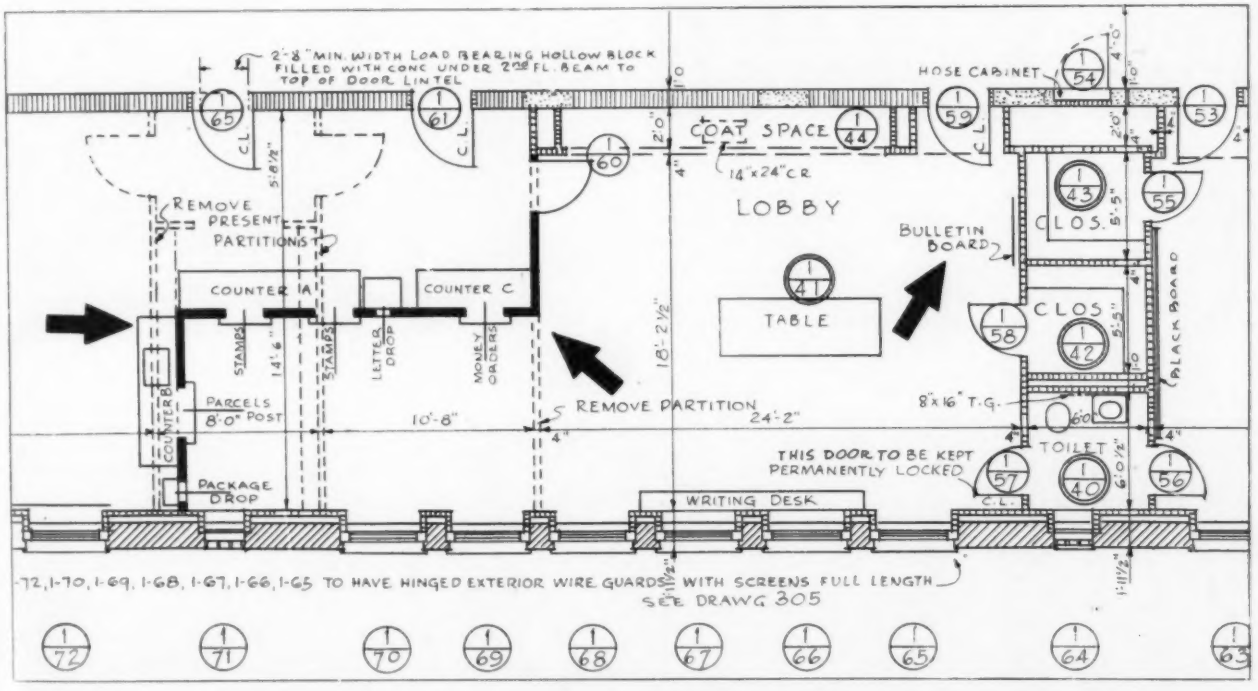
These temporary barracks will be removed when the plant is turned back to New York State

rooms, the other the list of rooms required by the Commandant, and controlled by Army standards. The problem was to juggle and adapt the existing rooms and facilities to the Army list of requirements. In order that all thinking might be kept clear, a tabulation of existing rooms and another of Army requirements were kept in parallel columns. In the first column was entered the *name* of the facility required by the Army; in the second column, balancing the name, the *number* of the corresponding room, carried over from the old plan. In this way it was possible to demonstrate quickly to the Army that its needs were met. A third column was used for notes. Often the point to be explained related to some improvement over original standards.

Mechanically, the drafting room procedure was simplified and efficient. The existing drawings were reproduced by means of "litho prints" on the back of tracing cloth, in reverse. Revisions were traced on the front. When the revision was complete, the "litho print" showing the original condition at that particular spot was erased by means of alcohol. So far as obtaining blueprints was concerned, it was of course inconsequential whether the line to be reproduced was an ink line on the face of the drawing or a lithographed line on the back. This simple method of correction, possible where the existing drawings have been made in ink, permits making sharp blueprints without redrawing the entire plan.

Expert volunteers direct many kinds of hobby work

Fragment of a revised plan, showing use of stamped arrows to call attention to changes. Original plans were for a school for mentally deficient children. Arrows were sometimes drawn in outline, keyed to specifications



Every plan had to be handled, of course, by the architect, the Army officers, contractors, and others. It was necessary to devise a quick method of spotting changes to be made; and this was done in the simplest manner, by stamping an arrow pointing to each change. Looking at a plan, it was possible to find the crucial points at a glance. As work progressed, the improvement was introduced of keying the arrows by drawing them in outline and inserting a number referring to their place in the specifications.

Doing the actual drawings was not so simple. Let us say, for example, that in Building Number Two a number of rooms were changed over into operating rooms. A sterilizer could easily be drawn in the appropriate new location; but as a practical matter the draftsman would have to check (a) whether appropriate steam and water connections were available, and (b) whether they had actually been installed exactly as indicated on the plan.

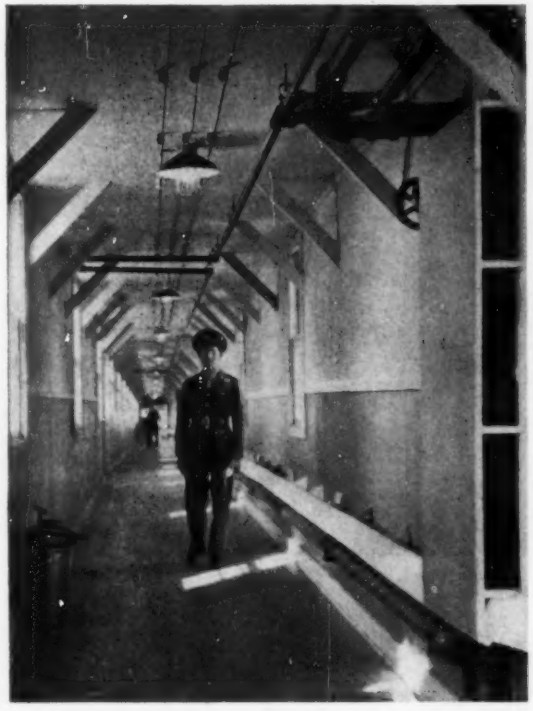
EXPANSION

When the decision was made to expand from a 1,500-bed to a 3,000-bed capacity, not only were new buildings added but further changes were effected in existing ones. By means of new methods improving the previous Army standard, this expanded plan now makes it possible to process patients at the rather amazing rate of 2,500 a day. Better than a third are litter patients and require special care. New covered walks were installed to insure indoor

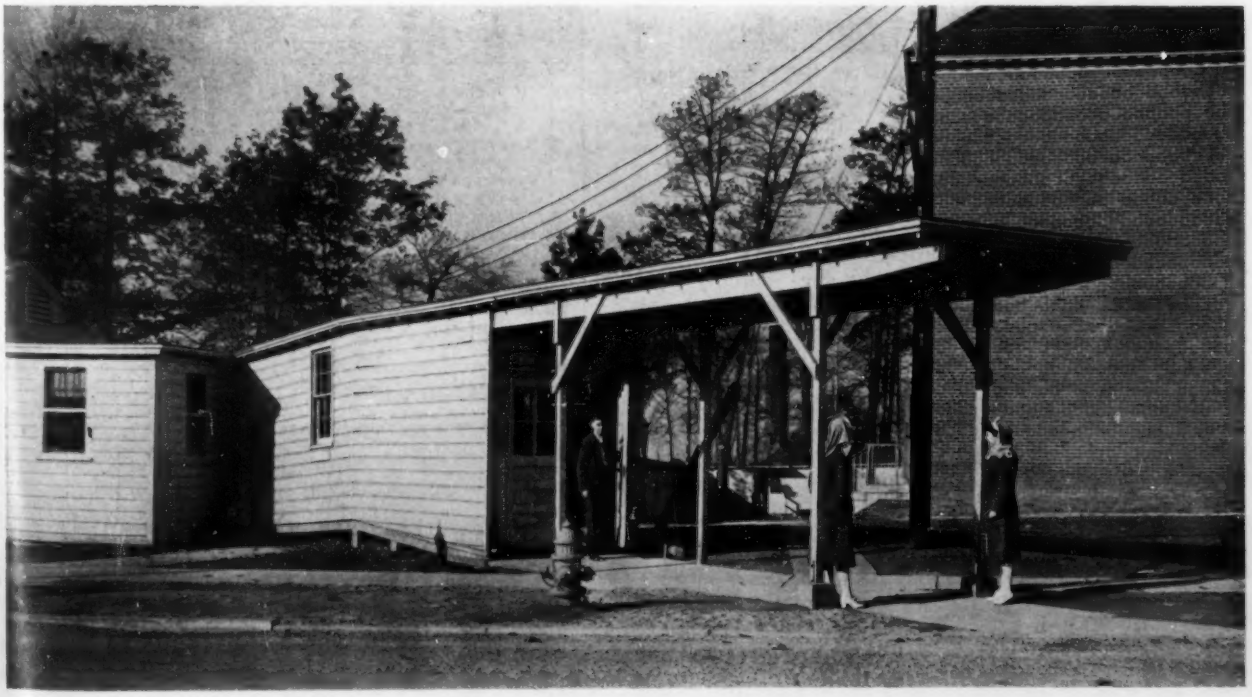
Besides giving the men a chance to buy perfume and jewelry for friends, the "PX" gives them a place where they can meet, eat, drink endless "cokes", listen to juke-box music, or get themselves a newspaper or a magazine. The "PX" was introduced in the basement of one of the existing buildings. For entrance details, see page 76

Below, interior and exterior: the wooden chapel is designed for services of all creeds. The fine Italian tripytych is from the Metropolitan Museum of Art, part of a large loan to the hospital of paintings, graphic art, sculpture and art objects. There are three and a half miles of covered walks such as the one shown in exterior and interior views on these two pages. The passages protect patients in all weather. Heating pipes near base

are brought up over door openings as precaution against thrusts created by expansion and contraction in the long runs. Note guards, wind-bracing. For purposes of speedy assembly and economy in materials, the covered walks were built to the try-square rather than the plumb-line; the windows are square to the floor, not plumb, regardless of slope. A slight modification is shown at the bottom of this page, where the ramped floor replaces steps



Instruction in art and craft work is given at Halloran to those who want it, as part of a widely ramifying recreational program, which includes many games and different sports. Many of the nation's leading entertainers have come to Halloran. A comprehensive library serves those in a serious mood; technical books are in wide use

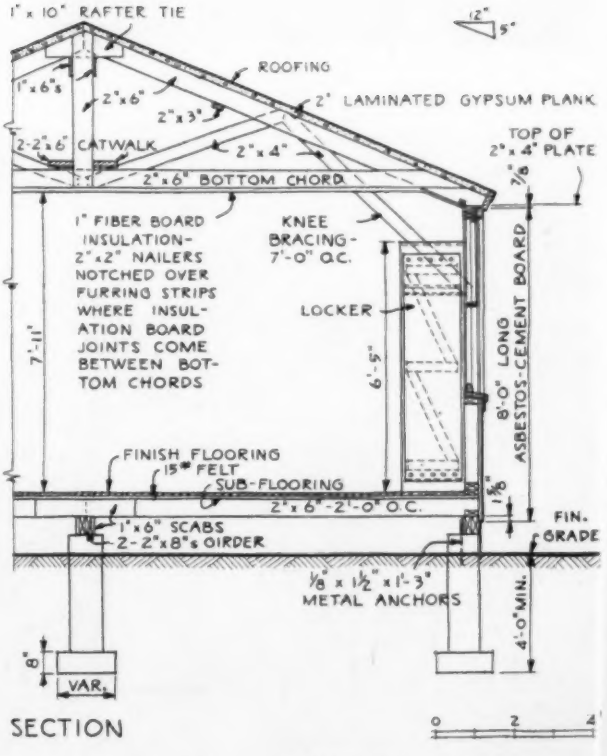


circulation, to a total length of a mile and a half. A new 32-building men's barracks group was added embracing sleeping quarters, latrines, offices; there was built one of the first barracks groups for WAC's. Six new clinical units embraced an additional surgery building, X-ray and medical building, laboratory, infirmary, G.U. and dental clinics, an officers' and nurses' recreation building, and a chapel. A large addition was made to Building Number 15, now used as the main reception building for the patients. It is here that they are brought in, tabulated, bathed, given hospital clothing and a first meal, and assigned to various quarters. Two of the existing permanent buildings were altered to house shops, a fire station, detention wards, commissary and medical storage.

The WAC's were, of course, the great novelty as a planning problem. At first it was decided to arrange their barracks in parallel, like those of the men, but with the latrines in U-links connecting the barracks by pairs, so as to keep both the latrines and the sleeping quarters under the same roof. A laundry was introduced in the link, and the open court was available as a drying yard. The dividend that accrued from this to the men was that their barracks also came to be joined thereafter in U-links with the latrine in the link, instead of separate.

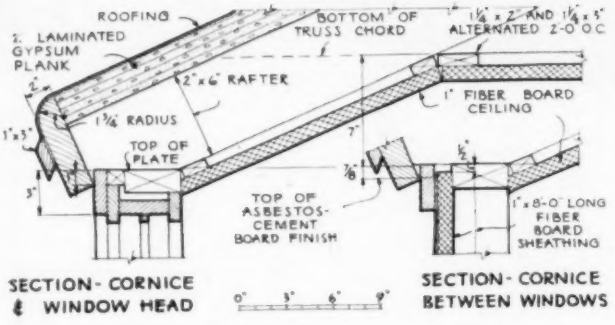
FLEXIBILITY AND IMPROVISATION

The basic efficiency of the architectural method left room for quick improvisation. The whole process of conversion and new design was a continuous one at top speed. Sometimes standards changed in mid-career, as



The two sections show trusses made up of light-weight timbers, and roof detail

Left, across-page, a recreation room, which can be cleared for dancing, and occupies space originally assigned to a laundry. Right, newsstand patrons at the "PX"


ROOFING
2" LAMINATED GYPSUM PLANK
2"x6" RAFTER
1⅜" RADIUS
TOP OF PLATE
TOP OF ASBESTOS-CEMENT BOARD FINISH
BOTTOM OF TRUSS CHORD
1¼" x 2" AND 1¼" x 5" ALTERNATED 2'-0" O.C.
1" FIBER BOARD CEILING
1"x8'-0" LONG FIBER BOARD SHEATHING
0" 3" 6" 9"

SECTION - CORNICE & WINDOW HEAD

SECTION - CORNICE BETWEEN WINDOWS

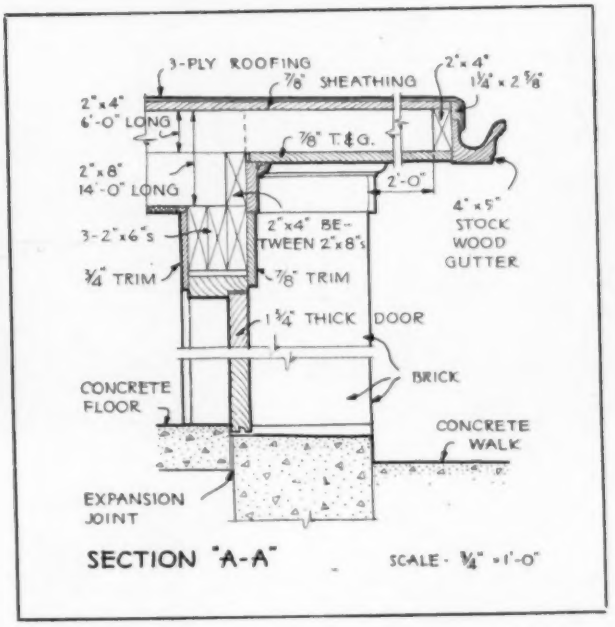
when the space requirement in the WAC barracks was raised from 50 sq. ft. per occupant to 70 sq. ft. Such changes were met in good spirit by all concerned.

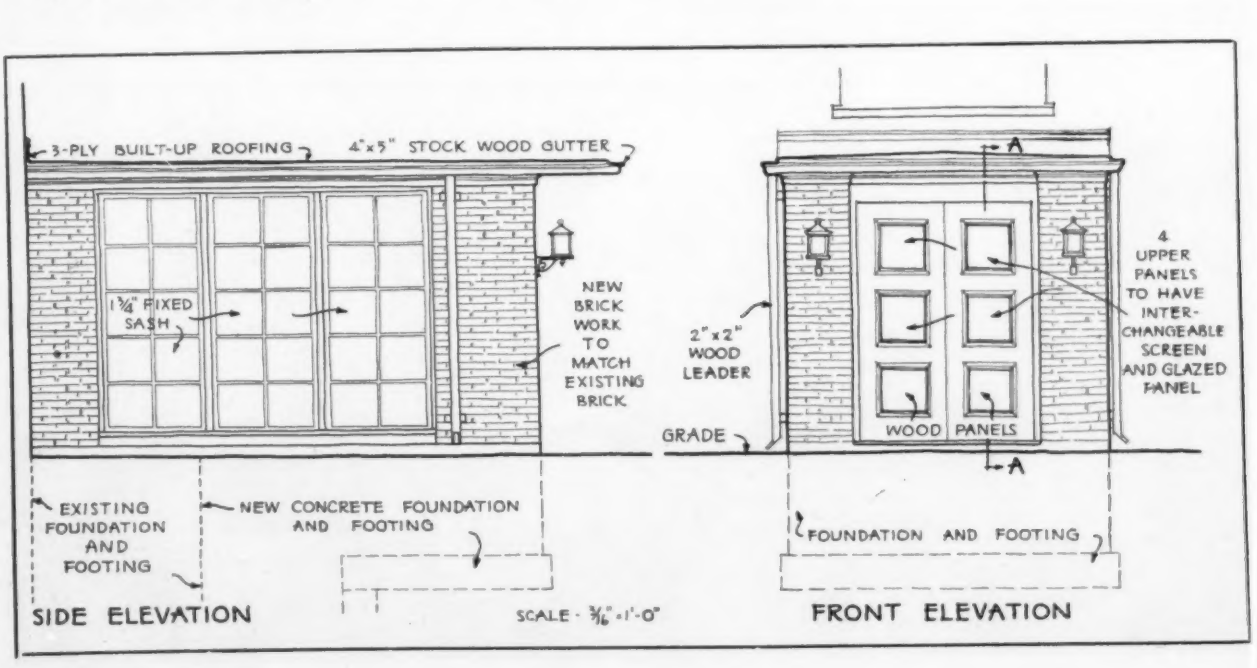
Throughout the rush it was never forgotten that this was a hospital for those who deserve the best. Here, again, the Army was fortunate in obtaining the services of an architect. It was through his suggestion, when Colonel DeVoe expressed a desire for more cheerfulness in the rooms, that an approach was made to the Metropolitan Museum of Art. Through the goodwill of the director, Henry Taylor, and the services of the curator, Richard Bach, there were loaned to the hospital pieces of

WAC barracks, below, introduced new planning standards. See discussion in text

Above: One-third of Halloran's patients are litter cases, yet they can be cleared for entry at the rate of 2,500 a day. Below, WAC barracks and "PX" entrance details

sculpture, original paintings, drawings, armor, and other art objects of an aggregate value running into six figures. A mere efficiency expert would have been prone to rest content with a "scientifically" appropriate color. But at Halloran, although efficiency was at a high peak, the ruling attitude was, "nothing too good for the boys."





PLANNED FOR PREFABRICATION

Parker Homes, Sacramento, Cal., for Federal Works Agency

William Wilson Wurster, Architect; Charles F. Dean, Associate

Roger Sturtevant Photos

Punnett, Parez & Hutchinson, Civil Engineers; Joseph E. Spink, Consulting Engineer; Thomas D. Church, Landscape Architect

BACK AROUND Pearl Harbor times, when prefabrication was heralded so heatedly, Mr. Wurster was called upon to speak for architects in a Washington conclave of prefabricators and government housers, he having just done the pace-setting Carquinez Heights project. What prefabricators wanted, it developed, was designs on four-foot modules. The upshot was that this project, of 332 units, was designed to be built for either conventional or prefabricated construction, in the hope that bids would give a practical comparison of costs. A prefab bidder won, and the project was so built. It developed later that the cost figures became too confused to be compared with any other calculations, and now all that remains is the evidence that for comparable space and equipment the final costs were remarkably low. Units averaged $2,300, with utilities, road and planting adding $600 (land and architects' fees not included). That permanent housing could be had for that, even in California, is less a matter of construction methods than of planning.

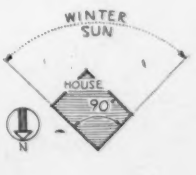
The general approach was to do something within the accepted suburban pattern (free standing houses, with sloping roofs, for example) but yet show a gain over the accretive process of the usual unplanned community.

One immediate gain came from orienting site plan and houses for sun and hot weather. Streets were turned diagonally to north-south so that there is no dank north side: even winter sun completes the 90-degree arc (see sketch) to reach each side for some part of the day. Thus too are kitchens shielded from the six-o'clock summer sun. And the units were designed and placed to take full advantage of a cooling evening breeze from the south by west.

Trees are placed to eventually make cool green lanes of the streets. Otherwise planting departs from the normal —each house is placed on a gravel platform, to make a tricycle path and to "present a neater picture than the usual messy base planting." Also to permit window cleaning and the necessary daily watering of gardens. Garden sides have no planting at all, as overgrown base planting is a California form of blight, preventing nice gardens and creating an urge for more open spaces.

Site plan generally follows the cul-de-sac system, for the grouping of three-bedroom units for greater safety of the children. Each of the individual houses has a car shelter, which serves such other functions as: porch for summer, play space for children, sheltered clothes yard for wet weather.

Planning for privacy makes for other community gains. All bedroom windows facing other houses are kept high from the floor, which also aids ventilation and furniture placement. Especial attention was given in this respect to the multi-



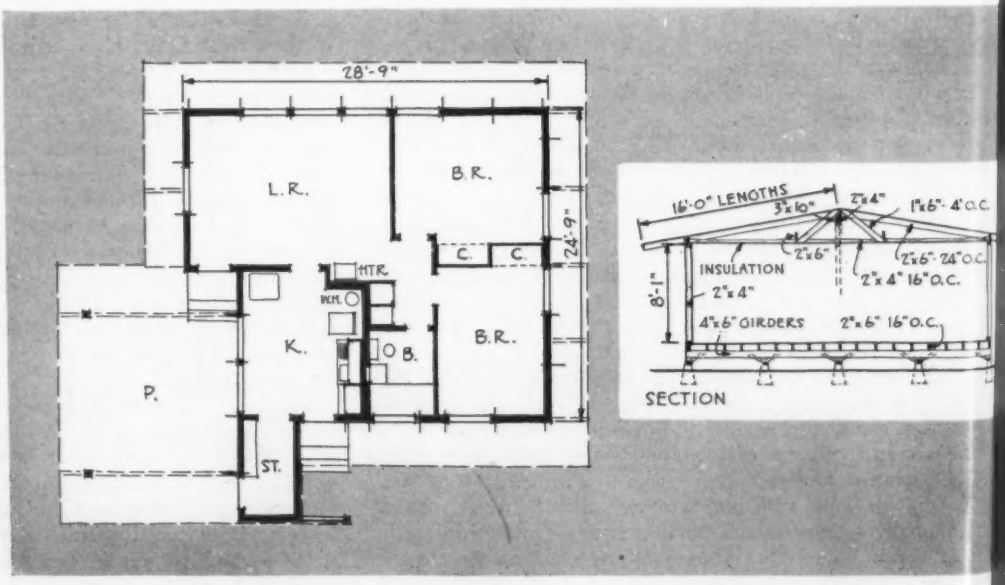
The two-bedroom house frequently has its kitchen toward the street. Then the entrance through car shelter opens to the living room, storage room door is a "hidden panel; kitchen door is at far side, in front

family units. Living rooms on the same floor are separated by the stairs. And living rooms are placed above each other, not above bedrooms. Soundproofing was cared for by a layer of sand between the floors, an idea that seems worthy of special notice.

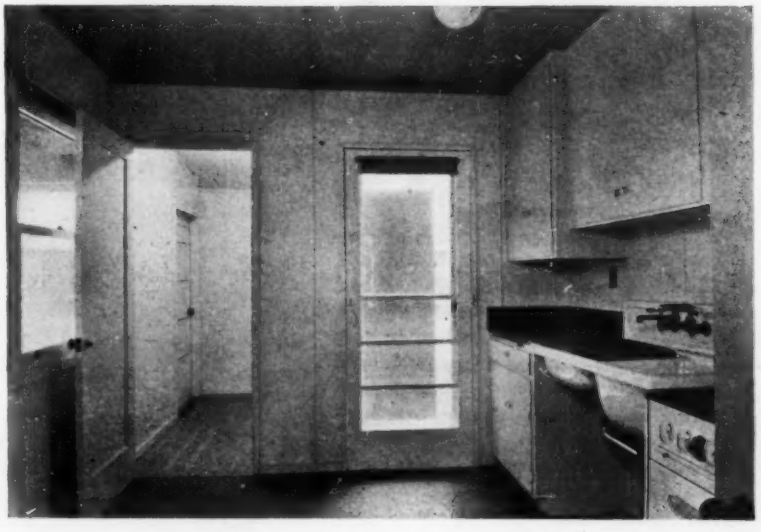
Visitors to the project have been especially impressed with kitchen and utility-storage room arrangements, which they recommend as unusually good for war housing. Storage rooms can be so partitioned as to make a pantry and an outside tool closet. Where there is no dining space kitchens are large enough for eating; all are exceptionally well provided with equipment and storage cabinets.

Interiors are of dry-wall construction, in plywood. To keep costs low, redwood siding for exteriors was sacrificed for waterproof fir plywood. For simplicity in upkeep, exterior base boarding is stained rather than painted. Wide roof overhangs also keep down maintenance costs, shielding walls from weather and keeping them cool in summer.

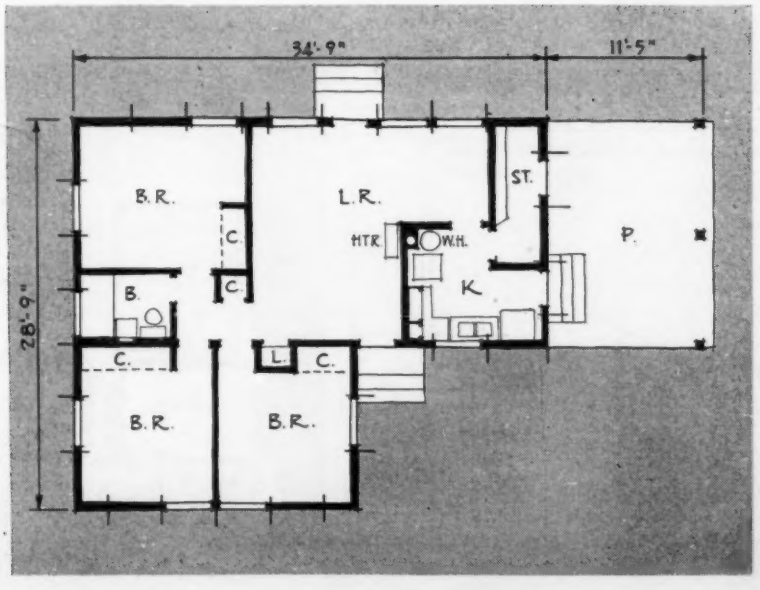
The space heater problem is nicely solved in the two-bedroom plan by letting a tiny hallway break into a corner of the living room, thus recessing the heater and also placing it well for heat distribution

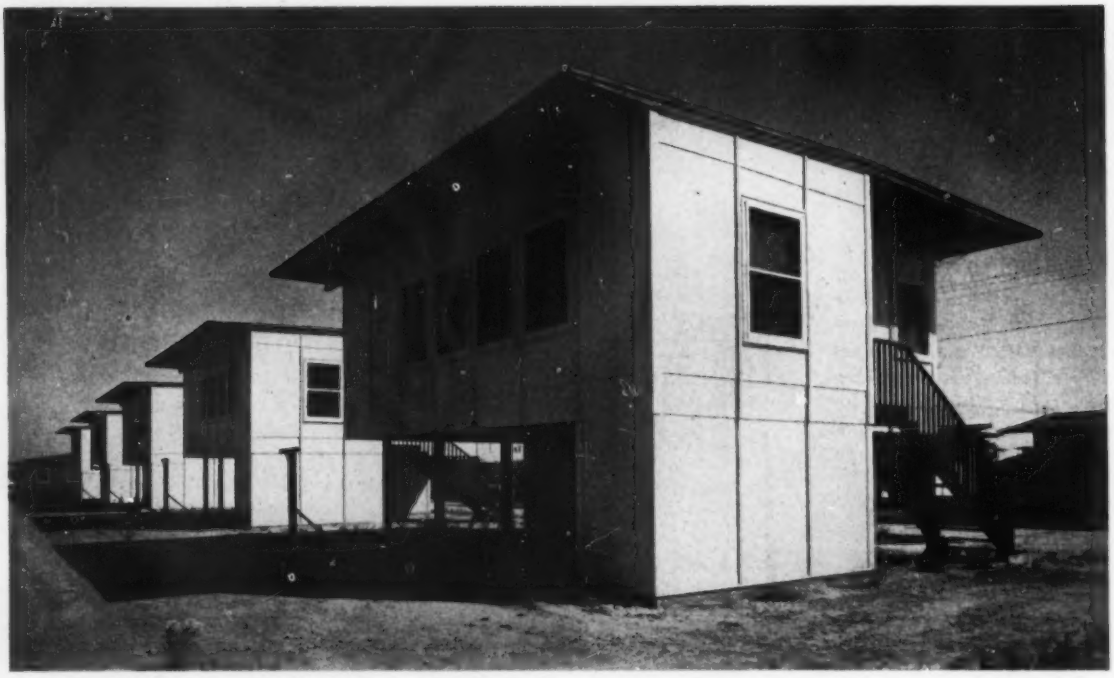


In the three-bedroom house the car shelter takes a side-porch location off the kitchen and storage room. Here again the outside storage room door is a concealed panel. The bath does not back up to the kitchen plumbing lines, but hall space saved in this location (calculated as representing $125 in construction) was more than enough to pay for extra piping

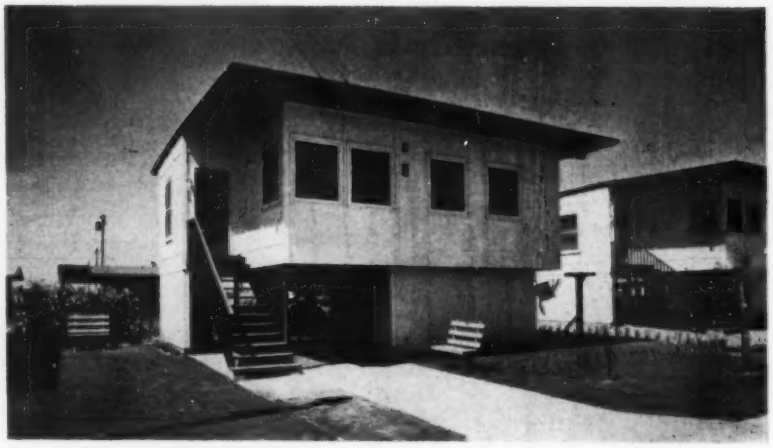


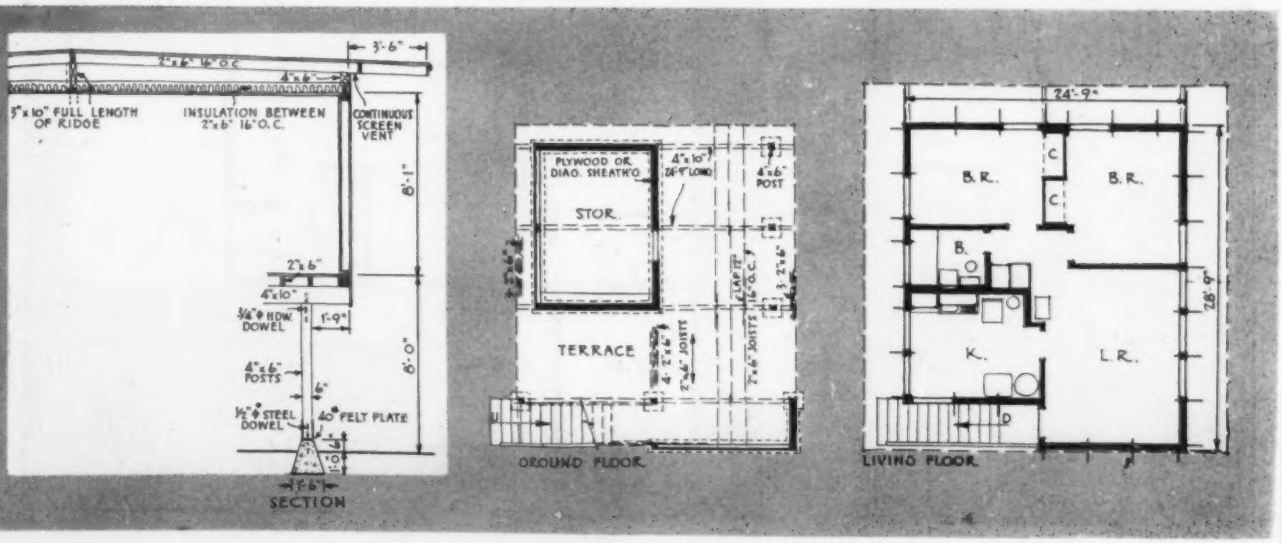
With 30 sq. ft. specified for the storage space, the architects could not quite make the favored California utility-porch-laundry, but could come close to it. Placed off the kitchen, it will hide the washing machine, provide extra kitchen storage space; and an outside door makes it convenient for garden tools. It could be partitioned into two separate closets

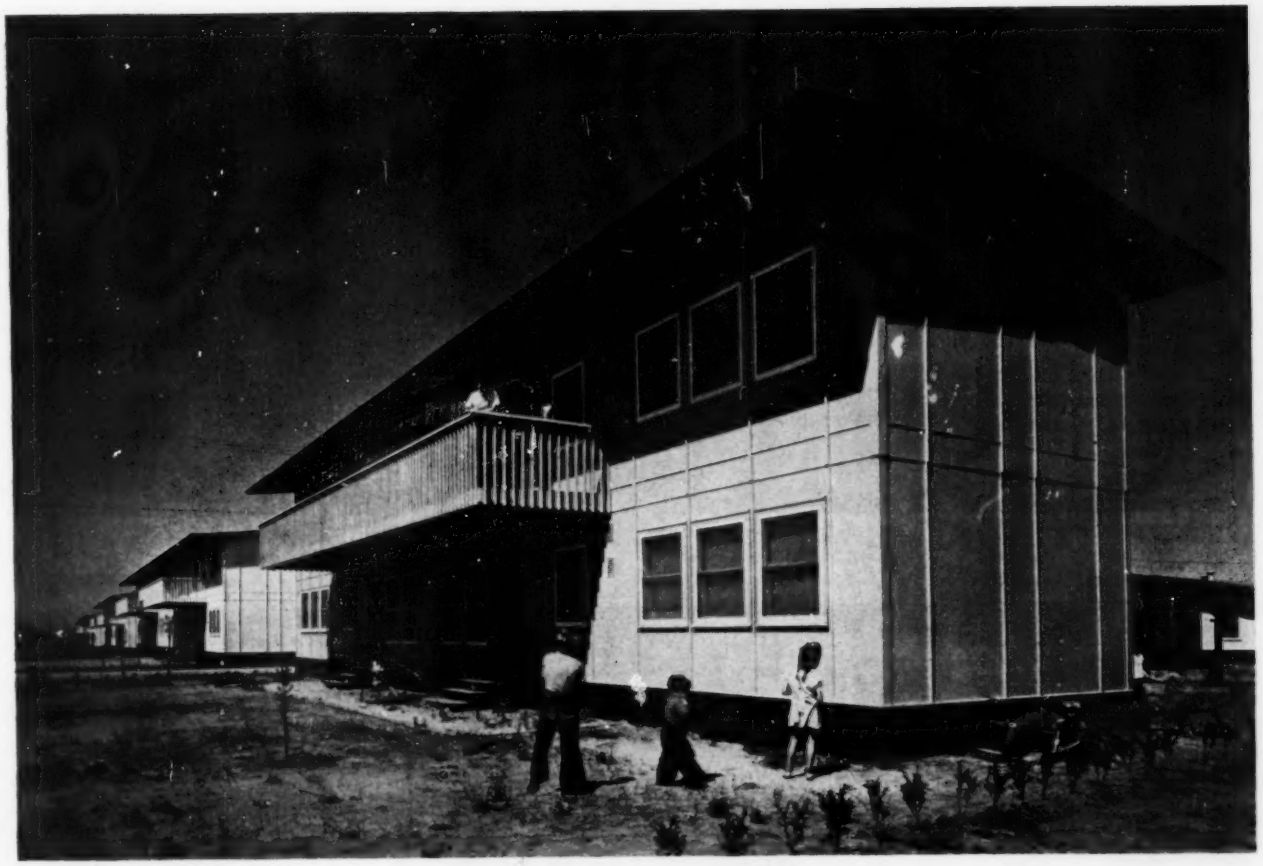




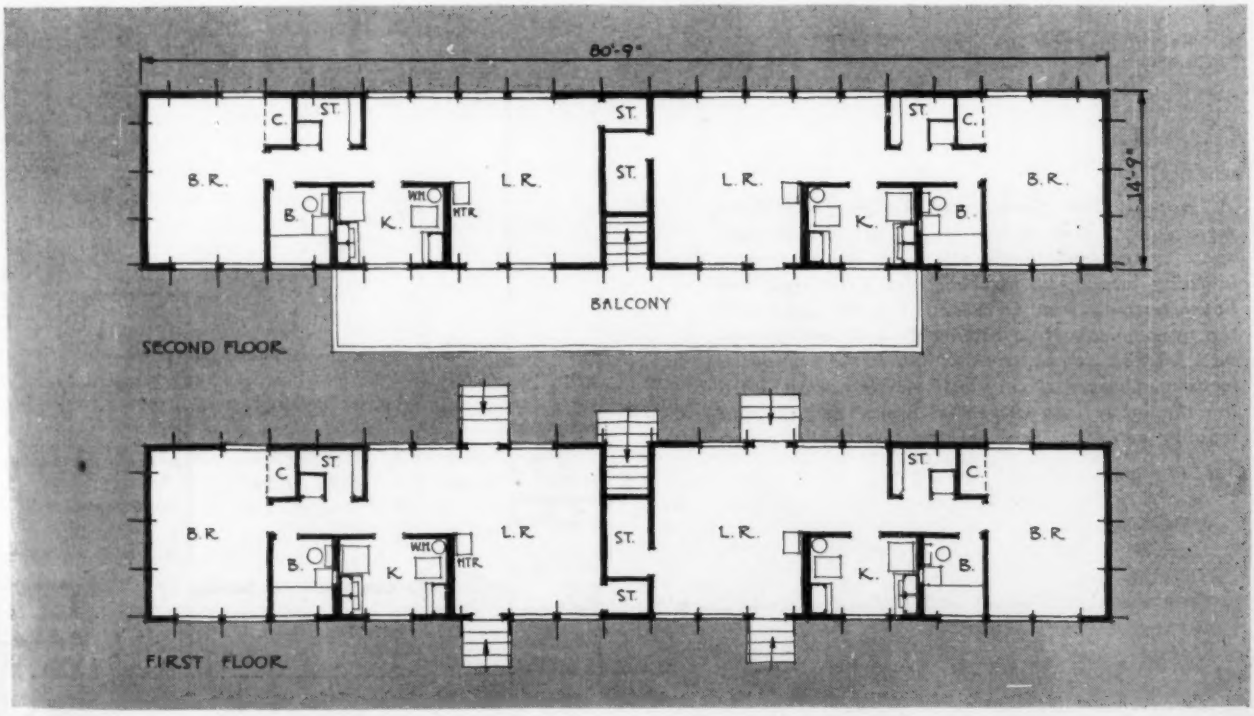
The "house-in-the-air" merely boosts up the two-bedroom plan, letting the house itself cover the car shelter and also a large storage room. While the storage room is tightly walled in this prefabricated construction, it could be enclosed with rough boards for ventilation. It could also be arranged for a laundry room. This house was actually estimated to cost less than the same plan on the ground, but the final costs were not separated for comparison



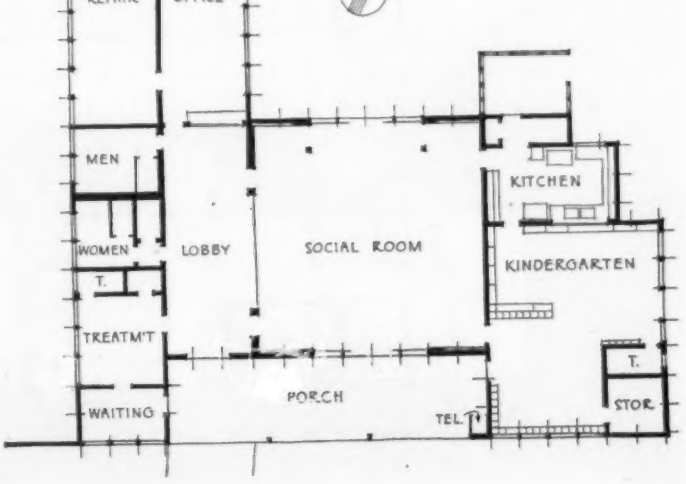




In the multi-family units there is no "back door;" stairways run directly through to a balcony on the garden side, with apartment entrances on either side of the stairs. Experimental houses proved the merit of Wurster's railing design; there are no cross pieces for children to climb. Balconies are wide enough for a couch



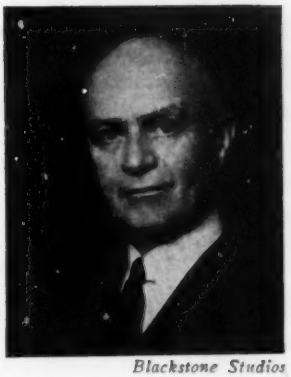
At present the Community Building combines management and maintenance facilities, though space is reserved in the site plan for a separate building later. The kitchen, placed to avoid the hot afternoon sun, is arranged to be used with the nursery school. A removable wall section permits kitchen demonstrations and home economics lectures. Upward sliding wall panels permit opening the lobby into the social room. And in mild seasons activities can overflow onto the porch



THE ROAD BACK TO NORMAL BUILDING

By Abner H. Ferguson

Commissioner, Federal Housing Administration



Blackstone Studios

THE PRESENT Congress has already taken precautionary steps to assure the continued operation of the FHA program. These have taken the form of extending FHA's authority to insure loans made for the repair and modernization of existing properties until July 1, 1947, and to insure mortgage loans for the purpose of financing the purchase of existing structures until July 1, 1946. The insurance of mortgage loans financing new construction, of course, required no Congressional action since the statutory authority for that operation is limited only by the dollar amount of all mortgage insurance that may be written and outstanding at any one time.

This action by Congress should give confidence to all those interested in the building industry that insofar as it is now possible the FHA stands ready to offer its services to the fullest extent in an efficient and speedy return to normal peacetime building activity.

As far as new construction is concerned, at the present time there remains on the FHA books practically a half billion dollars of unused insurance authorization still outstanding under Title II of the National Housing Act —sufficient to finance the construction of at least one hundred thousand homes. This unused authorization remains immediately available, and, in addition, the law permits the President to increase this insurance authorization by an additional billion dollars if and when the need becomes apparent.

Also, in an effort to give further encouragement to builders, manufacturers of building materials and to mortgage lenders, the FHA has made a survey of immediate postwar prospects. This indicates a probable total expenditure of some five billion dollars within the first twelve months after wartime restrictions are lifted for the construction of new houses and the repair and modernization of existing houses. On this basis the building industry will provide an average of 2,400,000 man-years of employment during the year. 1,250,000 men will be employed on the site and the industries allied to construction will employ an average of 1,150,000 more off the construction site, or a total of 2,400,000.

In the beginning, of course, total employment will be low, perhaps around 500,000 men, but as the industry gathers momentum it is quite possible that at the peak of activity during the year between three and four million men will be employed.

The larger part of this expenditure and employment will without question be found in the field of repair and improvement of existing houses. Such work may quickly reach a volume of about three billion dollars in the first year after the war. The survey made by the U. S. Chamber of Commerce showed that people have plans now involving over six billion dollars of repair work waiting to be done when restrictions are lifted. Just how much of this expenditure would go into labor and how much into materials there is, of course, no way of estimating. On the assumption, however, that they would be equally divided, even the conservative estimate of three billion dollars spent for this purpose in the first twelve months would furnish direct employment to an average of 875,000 people.

It is fortunate indeed that Congress extended the expiration date of Title I of the National Housing Act, since it provides a ready medium of financing repair and modernization work. The situation that will be faced after the war will be very similar in many respects to that which existed in 1934 when Title I first went into operation. At that time, just as now, repair and modernization work had been deferred during the years of the depression, industry had been almost at a standstill and we were looking for means to get people to work. That Title I, at that time, put more people to work at less cost and more quickly than any other expedient then tried, encourages us to believe that it will do so again. At the beginning, it will be remembered, it was knowingly and admittedly a subsidy. For the past several years, however, a premium has been charged, so that, like the FHA mortgage insurance program, it is now practically self-supporting. Altogether we have insured nearly four and a half million loans amounting to over $1,750,000 and averaging about $400 a loan—with losses to date of only 1.69 per cent. The popularity of the program in the past, the widespread benefits derived from it and above all the speed with which it can be put into operation, are a source of confidence in the role that it will play in the country's return to a prosperous peacetime activity.

In our attempt to determine new construction prospects, the FHA sought particularly to know the amount of land, both with and without utilities, available to builders, and the number of builders ready to start immediate construction. We have also been looking into the question of the types of materials that can be quickly procured. Of course, there is no question but that financial institutions have adequate funds to finance this new construction.

Naturally, we are well aware that no absolute predictions can be made, and that no power on earth can enable us to foresee all the factors which will affect a return to peacetime activity. The most important unknown factor, of course, is when the war will end and how it will end. For instance, suppose, as it is generally believed possible, that the war is over in Europe, but is continuing in the Pacific. In such case, how much wartime manufacture will continue on materials and manpower? In such case, also, will there be partial demobilization, and if so, what effect will that have upon employment and national income?

As to new construction, we realize that under the most

favorable circumstances it will take time to restore the delicate balance necessary to the proper functioning of the home building industry and the process will be gradual at best. It would hardly be possible that home building in large volume could be achieved overnight, since the sources of the industry are to be found in almost every other industry of the country—acquisition of land, production of raw material, manufacture of that material into specific products, transportation and assemblage of the various products, actual construction and final sale—and the tremendously important job of financing each and every one of the steps all along the way. And all of these industrial activities have been more or less completely disrupted by the war.

There have been many estimates of postwar home construction running as high as a million homes a year for ten years. I, myself, think that figure a bit too high, unless private enterprise and private capital can so organize their joint efforts as to better their past production performance. But whatever the figure is, what is often overlooked is the fact that revival of construction will be a gradual process with large volume reached only after a period of years—not a million new homes started the day after wartime restrictions are lifted or probably even within twelve months.

It should be remembered, however, that such figures are of estimated needs and represent an average number of units to be constructed over a given period of years in order to fill the need. On the other hand, the FHA survey represents the amount of new home construction that private builders are ready to start immediately after the green light is given, or shortly thereafter. A preliminary summing up of these estimates shows from 350,000 to 400,000 dwelling units will go into construction within the first year of a return to peacetime economic conditions. These houses will be built by about 20,000 builders at a cost of around $2,000,000,000.

The report shows further that a vast majority of the areas where the demand is expected during the first postwar year have ample supplies of lots with utilities already installed. This will greatly speed the resumption of normal home building activity, especially in the medium and upper price brackets where the initial impetus of housing demand is expected to be. In most cities, also, the inventory of developed lots is sufficient to meet a substantial and continuing demand for new construction. Only one out of five cities of 50,000 or more population reported an adequate supply of developed lots to permit immediate construction without time spent in necessary subdivision planning and utility extensions.

One very interesting fact brought out by the survey is the number of capable builders prepared to resume activity in the early postwar months. No area of any importance in the entire country is expected to have a scarcity of building organizations in spite of the fact that those now operating are less than a fourth of the 20,000 to 22,000 planning to resume operations within the first postwar year. And, as I say, these builders will start the construction of about 400,000 new houses within the first year of normal peacetime conditions—in other words, an average of about 20 houses each.

Looked at in terms of employment, on the assumption that the construction of a typical house furnishes the equivalent of one year's full employment for one man, then 350,000 to 400,000 people will be put to work for the first postwar year. However, since expansion of construction activity is a gradual process, continually gathering momentum, by the end of the year the industry may very well have about 700,000 people employed—and at the site construction only. By the end of the first postwar year, employment, including off-the-site labor, may very well be provided to 1,500,000 men in home construction and its allied industries.

Widespread employment is the key to the nation's economic well-being, and if these goals can be reached the industry can take a justifiable pride in its attainment.

It should not be forgotten, however, that any estimate of postwar employment depends primarily upon the availability of labor and also upon the availability of materials. Skilled labor may be particularly short, and the great deferred need for repair and maintenance jobs could easily absorb a large part of the skilled labor that otherwise would seek employment in the new construction field.

As for the materials situation, that also is a bit complicated. Some building materials do not change by reason of war. They simply have to fill new needs. Lumber, for instance, does not change, neither does roofing, nor siding. Copper wire remains copper wire. Whatever difficulty develops will be in equipment, in the manufactured items—in radiators, water heaters, ranges, refrigerators, bathtubs. In this field, I understand, it will take the industry from two to four months to reconvert their factories and resume normal production. I am told that the copper situation has eased considerably and that there is plenty of wire, cable and pipe that can be made immediately available.

I am given to understand also that rather than completely retooling for production of new and differently designed products, many manufacturers of household equipment—like the big automobile producers—plan to fabricate and market the last models they were producing, in order to get into production as quickly as possible. Then too there is the question of rebuilding sales and distribution systems. That in itself will be quite a job and will depend largely upon the availability of competent men.

As to the design of the houses to be built, I do not believe there will be any great revolutionary changes. Custom and tradition are not easily broken down, and for one thing I firmly believe that as far at least as the returning soldier is concerned, he has been thinking of the familiar cottage with its picket fence, and that is what he is going to want, rather than some strange new type of house.

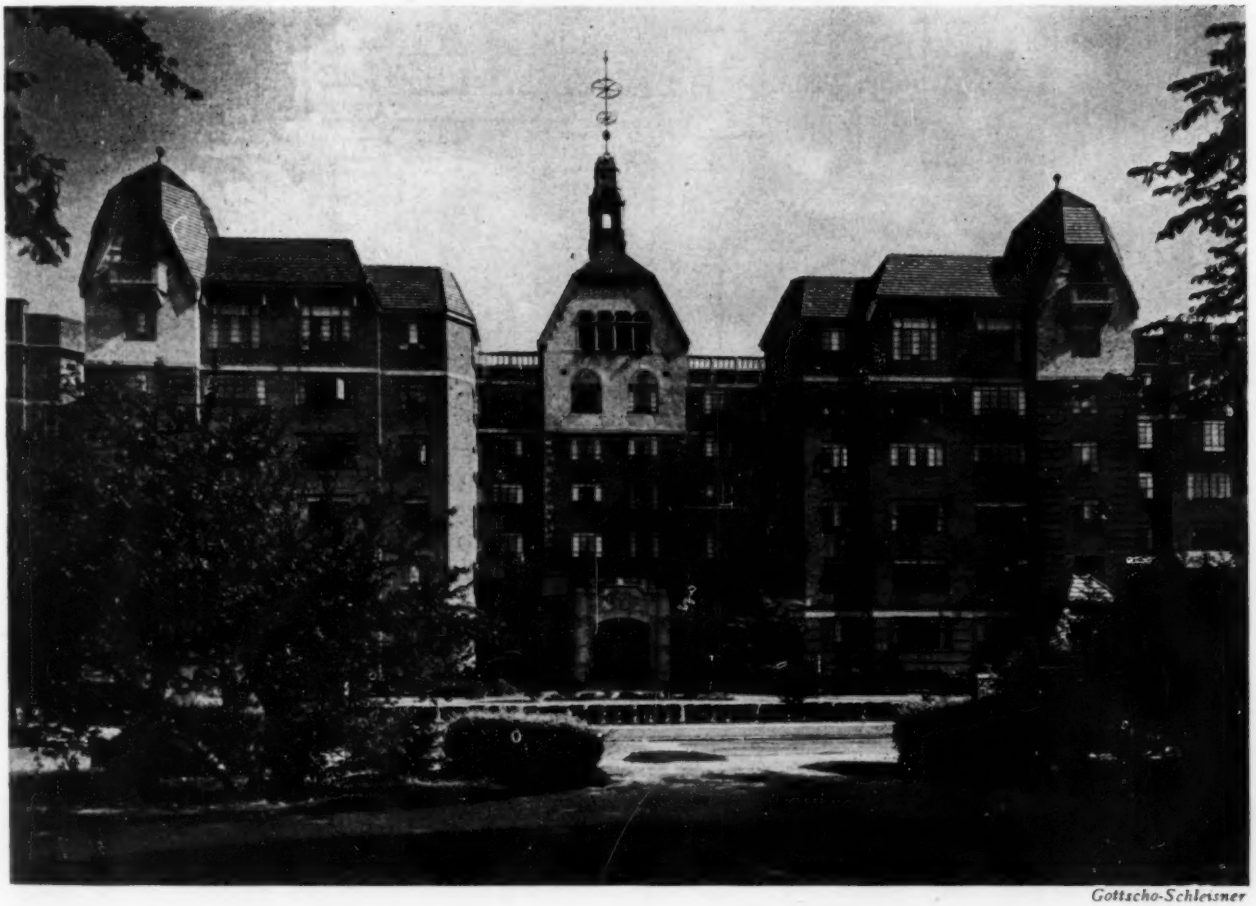
As to the price range of houses to be built after the war, initially the demand may be in the middle and upper-middle brackets, since the construction of such houses was almost the first casualty of the war, although in areas where no housing has been permitted during the war there will be undoubtedly a diversity of interest and building for all groups. The bulk of the demand in the after-the-war years, however, will be in the middle and lower-middle brackets. This means a continuation of the trend already underway for the development and large-scale production of lower-priced equipment.

It is not possible at this time, of course, to determine what effect the technical and scientific developments in new materials will have on the manufacture of equipment. Undoubtedly some, as the building industry gets into full stride. Nor is it possible to determine their effect on the lowering of costs. At the end of the war, for instance, aluminum production will be about seven times what it was before. The development of plastics has made gigantic strides, as has plywood. Magnesium and synthetic rubber are fairly new materials that are being produced in large quantity. It is hard to believe that the

(Continued on page 118)

A PROBLEM OF PRESSURES IN PLANNING

The Leslie Apartments, Forest Hills Gardens, New York
Alfred Fellheimer and Steward Wagner, Architects and Engineers



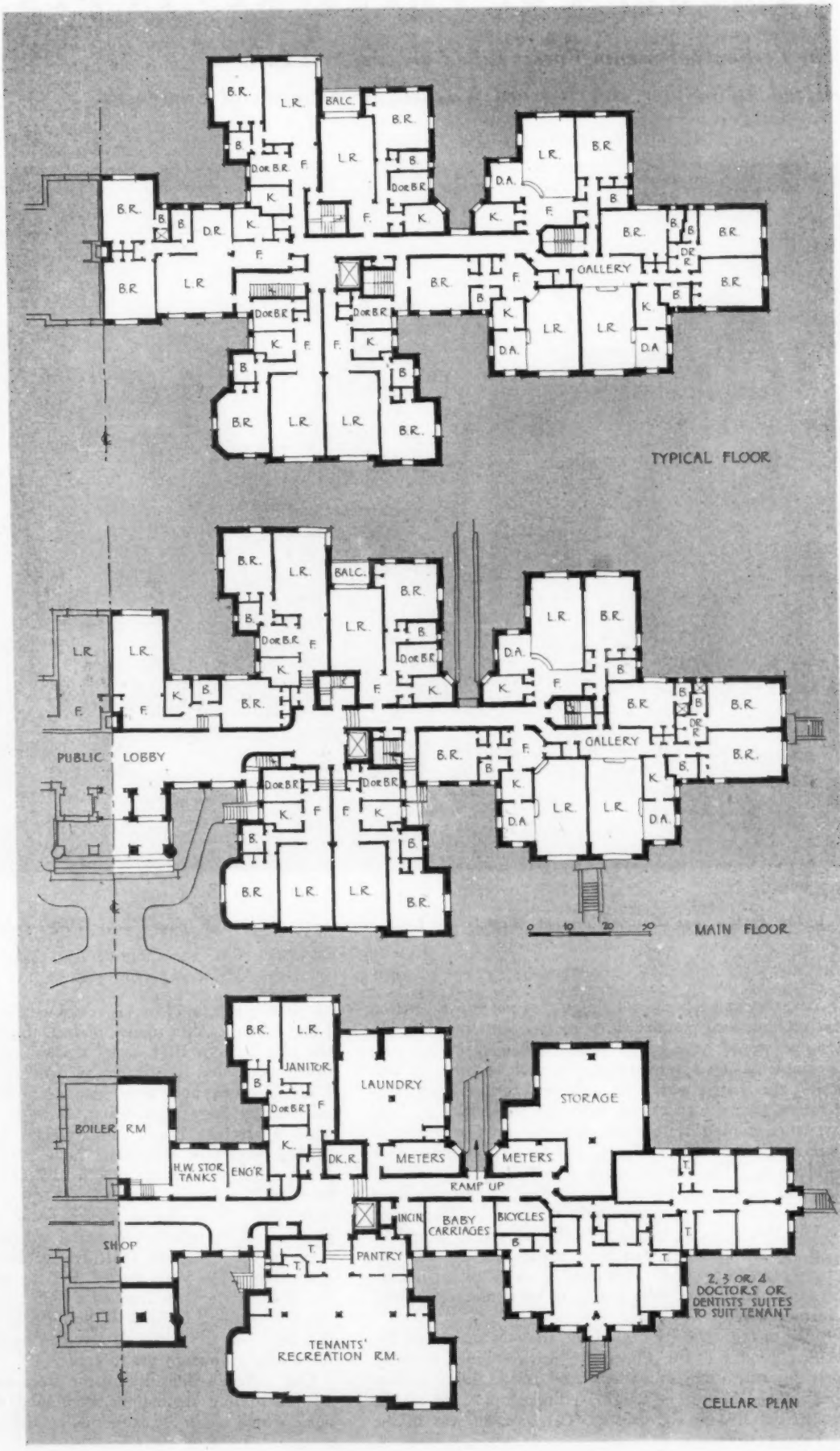
Gottscho-Schleisner

Exterior design was dictated almost entirely by land covenants, requiring conformity with neighborhood styling

If there were anybody still clinging to the wishful notion that architectural practice deals merely with building design, he would have had a rude awakening in bringing to completion an apartment project such as this. In this project the design work was only one part of a series of architects' activities dealing with the difficulties of land covenants, zoning restrictions, limiting interpretations of planning commission rulings, quirks of building code regulations. The design work was largely a matter of plan and economics, because the styling was fixed almost entirely by an arbitrary requirement that it conform with the Old World vogue long ago established in the neighborhood. Other attempts had been made over a period of fifteen years, others had attempted to draw plans, but always their economics were wrong or some obstacle proved insurmountable.

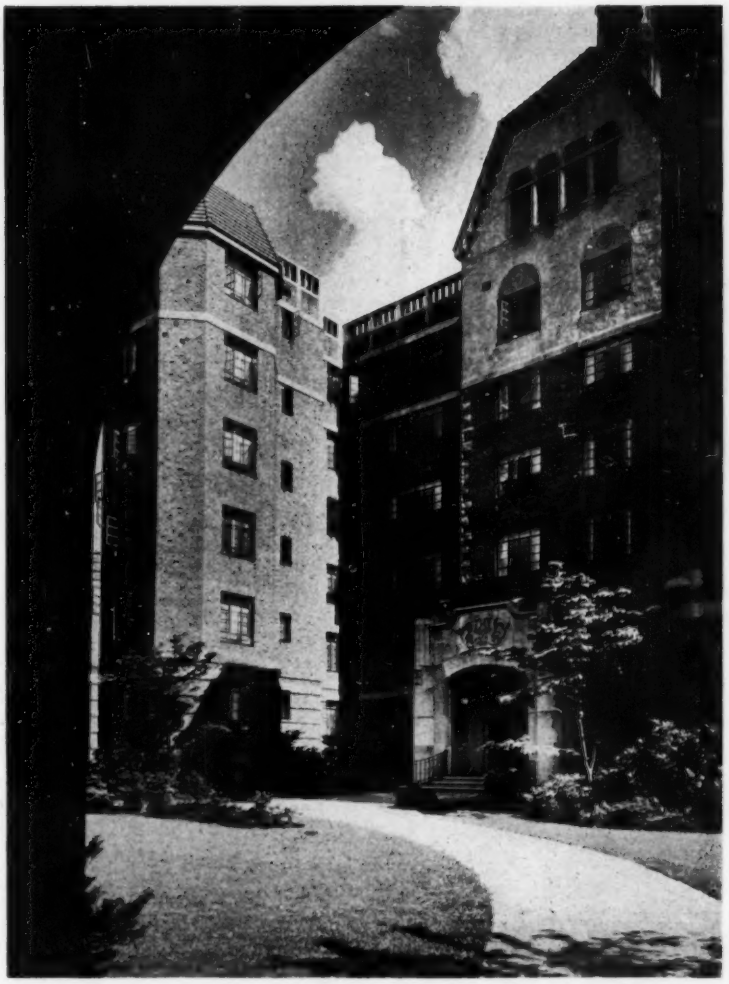
Much of the difficulty came from the odd shape and the peculiar location of the property, which combined to evoke harsh interpretations of various land and building restrictions. The site was a roughly elliptical plot left at the juncture of five or six streets. The location was in the one-family section of highly restricted Forest Hills Gardens, Long Island. As a matter of fact, the owner had bought the plot back in 1924 under a sales contract which specifically permitted its use for an apartment project. Forest Hills Gardens had been planned many years ago, for the Russell Sage Foundation, as a demonstration of an ideal apartment house development, but had then attracted buyers of individual home sites. Aside from a few buildings of the inn type it had no multi-family buildings, and a section reserved for them never had been developed. The plot in question was a prominent location set off by strictly residential streets, a focal point of street views. Thus the apartment project provoked heated discussion. The years passed, but the taxes went on and on. Finally the issue reached a high court, which handed down a decision in favor of permitting the apartment on this lot. But this victory proved to be only a bridgehead for a long campaign yet to come.

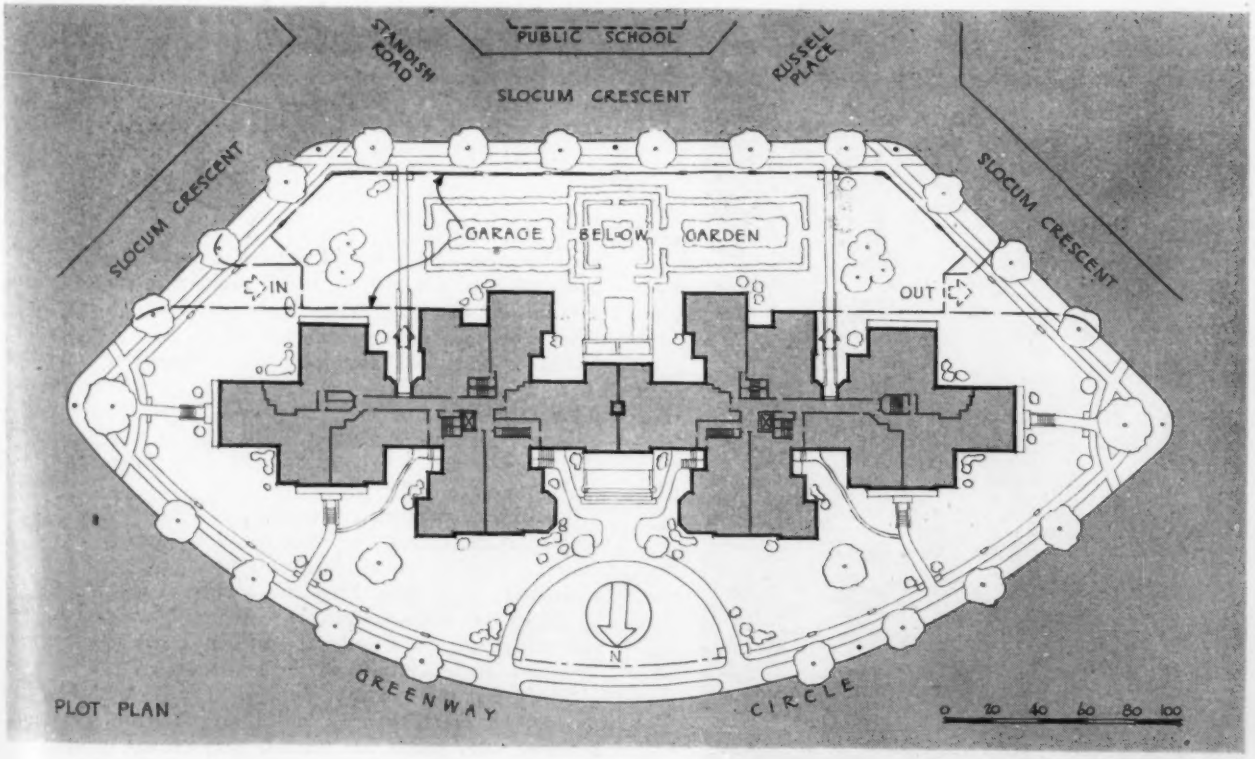
One series of difficulties came from city planning commission zoning regulations, combined with land restrictions, which made the economic considerations impossible.


TYPICAL FLOOR
PUBLIC LOBBY
GALLERY
MAIN FLOOR
BOILER RM
H.W. STOR. TANKS
ENG'R
JANITOR
LAUNDRY
STORAGE
METERS
RAMP UP
BABY CARRIAGES
BICYCLES
PANTRY
SHOP
TENANTS' RECREATION RM.
2, 3 OR 4 DOCTORS OR DENTISTS SUITES TO SUIT TENANT
CELLAR PLAN

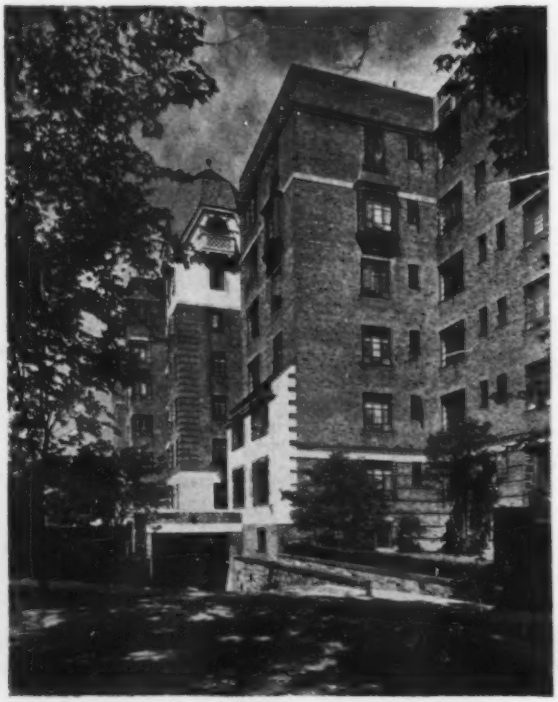
Economic pressures were something to reckon with. The owner had taken his beating for 18 years of taxes, which ran $7,500 a year. While rentals could be put at respectable levels, they would not permit a sound building within the limitations then in effect. The odd shape of the plot with all its street frontages limited the land coverage under zoning regulations to 27 per cent of the ground area. The building could be only six stories. Outside fire escapes were prohibited by land covenants, making it necessary to use much space for inside fire towers. And a requirement of outside windows in each corridor further cut into the normal development of spaces. All in all, the minimum land coverage worked out to be something like 33 per cent.

The only solution was to get the 27 per cent limit raised. But that started another series of difficulties. The 27 per cent came from a strict interpretation of planning commission rulings, calling for setbacks from each street. In the unusual conditions imposed by this plot, presumably a modification





PLOT PLAN



Necessity for neighborhood conformity did not extend to the interior, as is evident in the lobby (above). Left: entrance to underground garage, subdued by planting

was in order, but it would require a public hearing and notification of the hearing to all property owners within a radius of 500 feet. The owner was loath to start another fuss, but it seemed unavoidable. Accordingly, the architects undertook to notify the surrounding owners, to explain the situation and to do some "selling" as to the contribution that the project would make to the community. They were successful in worrying it all through the commission's hearings, but the one dissenting note started another cycle.

The fire department representative objected to the concentration of parked cars that could be expected in the streets. That one was solved only by changing the plans to include a garage. Here neighborhood considerations again became a serious factor. The result was an underground garage, built under the garden areas, and reached by ramps all but hidden in the landscaping.

Surely that was victory. But no. The borough's building department had never had a case of a non-fireproof building with inside fire towers, and refused to approve

the plans. Arguments that inside towers represented a desirable advance did not prove very effective as against the custom of outside fire escapes. It was therefore necessary to appeal the decision of the borough department with the city chief. And so, finally, all objections had been compromised or overcome, and the building was built, 18 years after the site had been purchased.

And after it was finished, the neighboring property owners became enthusiastic about it, the owner finally had an income-producing property and the architects had the satisfaction of solving another "insoluble problem." Architecture is a study in "making friends and influencing people" as well as making plans and supervising construction.

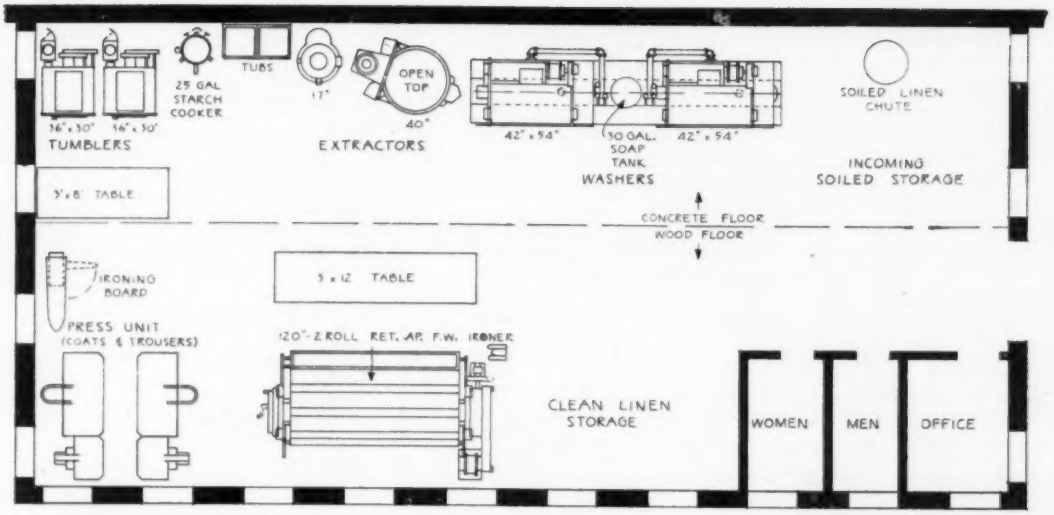
Odd roof spaces utilized for sun decks and for sheltered recreational areas. Below: a typical living room

The area above the underground garage was developed for formal gardens, though the formality was sacrificed to the war effort, as the floor gardens became tenants' vegetable plots. The massive posts in the wall are actually vents for the garage

The city fire department made one of the final objections to the project on the ground that it would produce a dangerous concentration of automobiles in streets already difficult for traffic. The answer was a parking garage, hidden under ground

HOTEL LAUNDRIES

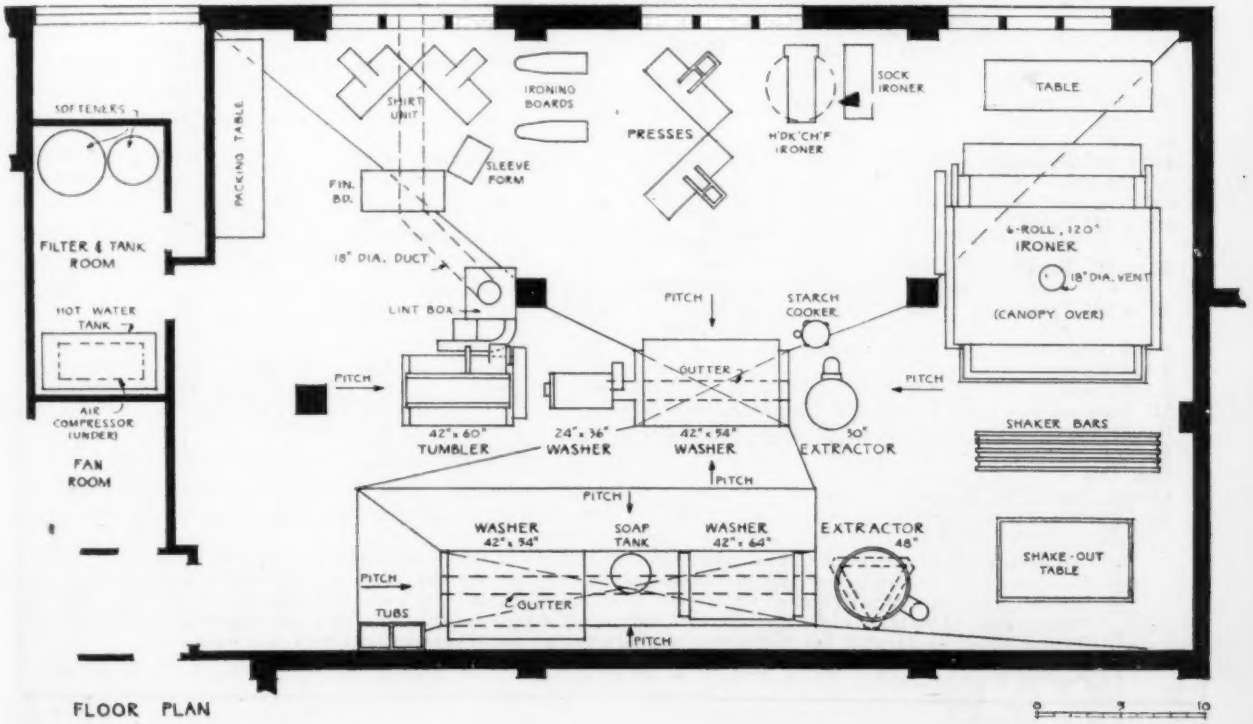
TIME-SAVER STANDARDS
JANUARY, 1944



FLOOR PLAN

Here is a proposed laundry plan for the Wenonah Hotel, Bay City, Mich., remodeling, by Francis Keally, architect (see page 53). Generous in overall space, it has room for storage of both incoming and outgoing linen, also for toilet rooms and an office. Equipment layout is normal for the small hotel without much guest laundry; some additional items would be needed for that. Equipment by American Laundry Machinery Co.

Below is an actual plan for a hotel laundry, for the Hotel Roanoke, Roanoke, Va., George B. Post & Sons, architects. This hotel is approximately twice the size of the Wenonah. The plan above has something over the normal average of 8 sq. ft. per hotel room, the one below showing somewhat less. Difference is in laundry storage space, which could not be provided in the lower plan. Equipment by U. S. Hoffman Machinery Corp.



FLOOR PLAN

ARCHITECTURAL RECORD
TIME-SAVER STANDARDS
JANUARY, 1944

HOTEL LAUNDRIES

Data from U. S. Hoffman Machinery Corp.

These data on laundry loads and requirements are for typical commercial hotels of small to medium size. For that reason they do not include any provisions for guest laundry. Larger hotels offering that service would have somewhat higher laundry loads per room. Larger hotels would also have higher volumes of laundry from dining rooms, due to convention facilities, special dining rooms and bars. Such extra load might add up to 15 per cent.

Different types of hotels might also have special laundry requirements. An exceptionally high-rate hotel, for example, would undoubtedly show higher requirements for towels. And apartment hotels might be expected to depart from the normal in dining room service.

EQUIPMENT LIST FOR TYPICAL HOTEL LAUNDRIES

Equipment	100 Rooms	200 Rooms	300 Rooms
Washers	1 44"x64"	1 44"x84" 1 36"x54"	2 44"x72" 1 36"x54"
Extractors	1 30"	2 30"	1 48" 1 30"
Tumblers	1 36"x42"	1 42"x60"	1 42"x90"
Flatwork Ironer	1 2-roll-120"	1 4-roll-110"	1 6-roll-110"
Presses	—	1 51" manual	2 51" air
Ironing Boards	1 with iron	1 with iron	1 with iron
Starch Cooker	1 15-gal.	1 15-gal.	1 25-gal.
Soap Tank	1 30-gal.	1 60-gal.	1 60-gal.
Laundry Tray	1 2-Compt.	1 2-Compt.	1 2-Compt.
Air Compressor	—	—	1 2½"x3½"

LINEN LAUNDRY DATA FOR HOTELS

Room Service Only	Quantity	Weight each, lb.	Total lb. per day
Sheets	2	1.0	2.0
Pillow Cases	2	.3	.6
Hand Towels	2	.2	.4
Bath Towels	1	1.0	1.0
Bath Mats	1	1.5	1.5
Shower Curtains	1	1.0	1.0
Spreads	1	1.5	1.5
			8.0 lb.
Coffee Shop and Dining Room—Per Table			
Table Cloths	2	1.0	2.0
Table Tops	4	.5	2.0
Napkins	8	.2	1.6
Waitresses' Uniforms	½	.5	.25
Maids' Uniforms	½	.5	.25
Glass Towels	½	.5	.25
			6.35 lb.

Coffee shops and dining room will average one table for each four rooms. Thus these rooms will add 1.59 lb. of laundry per hotel room. The rule-of-thumb for weight of laundry per room, then, is 9.59 lb. per day. Equipment for laundries is usually based on laundry operation on a 5½-day week, or 44 hours. Therefore the daily load on the laundry itself would be somewhat higher. For example, for a 100-room hotel: 9.59 x 100 x 7 equals 6713 lb. per week; then divided by 5½ equals 1220 lb. per day. Note: these figures do not include any allowance for guest laundry, as many smaller hotels do not handle it in the hotel laundry.

AVERAGE LOAD REQUIREMENTS AND SERVICE CONNECTIONS

	Capacity			Water		Steam			
	Pounds Per load	Loads Per hour	Motor H.P.	Hot	Cold	Feed	Return	Lb. per Hour	Drain
36" x 54" Washer	125	6 loads per 8 hour day	2	1½"	1½"	1¼"	—	328*	6"
44" x 64" Washer	225		3	2"	2"	1¼"	—	547*	8"
44" x 72" Washer	275		4	2½"	2½"	1¼"	—	710*	8"
44" x 84" Washer	300		4	2½"	2½"	1¼"	—	788*	8"
30" Extractor	70	4	3	—	—	—	—	—	2½"
48" Extractor	220	2½	5	—	—	—	—	—	3"
36" x 42" Tumbler	55	2	1-fan ½-cylinder	—	—	¾"	¾"	90	—
42" x 60" Tumbler	80	2	2-fan 1½-cylinder	—	—	1"	¾"	150	—
42" x 90" Tumbler	135	2	3-fan 2-cylinder	—	—	1½"	1"	280	—
2 Roll Ironer	120 lb. per hour		2	—	—	1"	1"	100	—
4 Roll Ironer	250 " " "		4	—	—	1¼"	1¼"	200	—
6 Roll Ironer	300 " " "		5	—	—	1½"	1¼"	300	—
51" Press	7 " " "		—	—	—	½"	½"	35	—
Ironing Board	3 " " "		1000 Watts	—	—	—	—	—	—
Starch Cooker	—	—	—	½"	—	½"	—	15	⅜"
Soap Tank	—	—	—	¾"	—	¾"	—	25	—
Laundry Tray	—	—	—	½"	½"	—	—	—	1¼"
Air Compressor	—	—	1½	—	—	—	—	—	—

*The pounds of steam per hour indicated for washers is based on using an average of 5 gallons total water per pound of clothes laundered. 70% of the total water used is hot water, and since an average of one pound of steam is required to raise the temperature of one gallon of water from tap average 45 degrees F. to 180 degrees F. water heaters should be provided to furnish hot water for washers rather than heating water in the washers with live steam. Steam for laundry machinery should be provided at 100 pounds.

Looking ahead with Asbestos

THE MIRACLE MINERAL

and the flight metal

The metal of the moment is magnesium. The miracle mineral that has helped make this industry's amazing growth possible is...Asbestos.

Millions of square feet of K&M "Century" Asbestos Corrugated and Flat Sheet material, for example, have gone into roofs and sidewalls, interior linings, fire resistant partitions, cover plates and insulators in many of the large magnesium plants from Texas to Michigan. The reason why these important producers turned to "Century" is simple—the necessities of war called for a material that could be rapidly installed, while plans for the future made permanence equally important.

The fact that K&M "Century" Corrugated and Flat Sheets are being re-ordered, time and time again, for plant expansion and new construction, is ample proof that their performance is satisfying all requirements.

Naturally, this maintenance-free sheet material has been in great demand for *all* types of essential wartime construction, but now that many of these obligations have been met, it is now available in greater quantity than ever before.

Just as magnesium has helped turn the tide of war in the air and is ready to usher in a new age of flight, so are we at K&M looking ahead with the miracle mineral . . . Asbestos. From today's research will come new and improved products, and a far broader range of service in the "V" years ahead.

* * *

Nature made asbestos
Keasbey & Mattison, America's asbestos pioneer, has made it serve mankind . . . since 1873

KEASBEY & MATTISON
COMPANY, AMBLER, PENNSYLVANIA

★ Our Ambler plants proudly fly the Army-Navy "E" flag—an honor awarded K&M employees "for outstanding production of war materials."

PLASTICS

Greater Structural Efficiency

"All materials and design studies made thus far indicate conclusively that low density materials such as plastics will undoubtedly permit the achievement of greater structural efficiency and lighter weight in future types of aircraft," Charles F. Marschner, manager, plastics division, McDonnell Aircraft Corp., St. Louis, told the American Society of Mechanical Engineers at their annual meeting in New York.

"Standardized plastic structural members and panels will probably contribute heavily to improvements in housing, refrigeration and air conditioning units and furniture," Mr. Marschner also stated. "There is every indication that intelligent engineering and development work will solve the problems which will be encountered in the extended application of plastic materials in domestic and industrial uses. In the postwar period standardized structural sections made from high strength plastics may be used in buildings because of their resistance to corrosion, probable greater speed of assembly due to light weight, and natural insulation properties of these materials. Flooring and wall panels as large as 8 by 12 ft., having excellent insulating properties and high strength, could now be made if desired."

Wire-Insulating Materials

Wire-insulating materials whose flame resistance is a vital asset to Allied warships and tanks eventually will help cut down the number of home fires due to electric wiring faults, George Fowles of the B. F. Goodrich Co. told the 13th annual convention of the Wire Ass'n. held recently in Chicago.

The exceptional "self-extinguishing" characteristics of some of the modern vinyl chloride thermoplastics, Mr. Fowles said, has been a chief factor in their adoption for wire and cable insulation by the Navy. Some of these thermoplastics had gained wide use in consumer articles before the war, Mr. Fowles pointed out, and were well known to the public in such forms as shower curtains, umbrella covers and transparent belts and suspenders.

Test Program for Laminated Material

A test program to record properties of laminated materials, organized and financed by the laminated plastics industry and to standardize specifications and determine "best use" applications has just been given further impetus in a research-test center at Johns Hopkins University, Baltimore, as a wartime development which is conceivably projected for possible permanent establishment.

The testing program originated when laminated manufacturers united in providing facilities for the tests in the Johns Hopkins School of Engineering to facilitate obtainment of concrete facts about laminates as applied to the wartime aircraft field.

FLUORESCENT FIXTURES

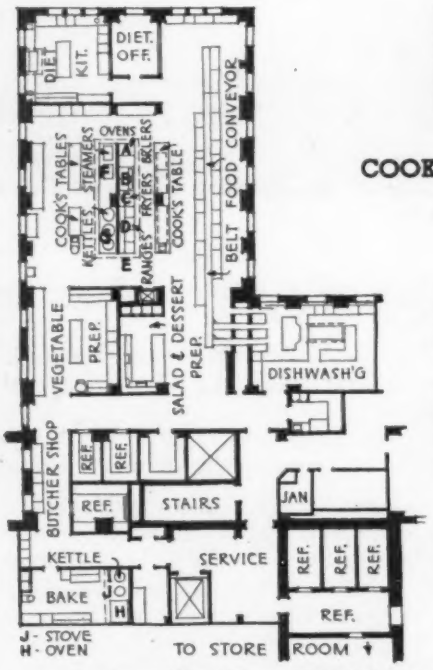
Following WPB's recent ruling that from December 1, 1943 lighting equipment manufacturers may again produce "commercial type" fluorescent lighting fixtures, providing prescribed material limitations are adhered to, several companies have announced new units.

Type F N C Luminaire, designed for easy continuous strip installation. The light-weight fluorescent luminaire with one-piece, double-length hood and full-size reflectors. Available for with four or six 40-watt or four

(Continued on page 98)

KITCHEN PLAN NO. 7: Seventh in a series of successful mass-feeding kitchen plans.

This is the kitchen plan for a modern hospital of 475 beds, designed to handle 600.



KEEP FOR HANDY REFERENCE!

COOKING EQUIPMENT USED:

(a) 1 No. 959 BLODGETT GAS-FIRED ROASTING OVEN
(b) 2 Broilers
(c) 2 Fryers
(d) 3 Skeleton Hot-Top Ranges
(e) 1 Range
(f) 2 Steamers
(g) 3 Stock Kettles
(h) 1 No. 982 BLODGETT GAS-FIRED BAKE OVEN
(i) 1 Stock Kettle
(j) 1 Confectioner's Furnace

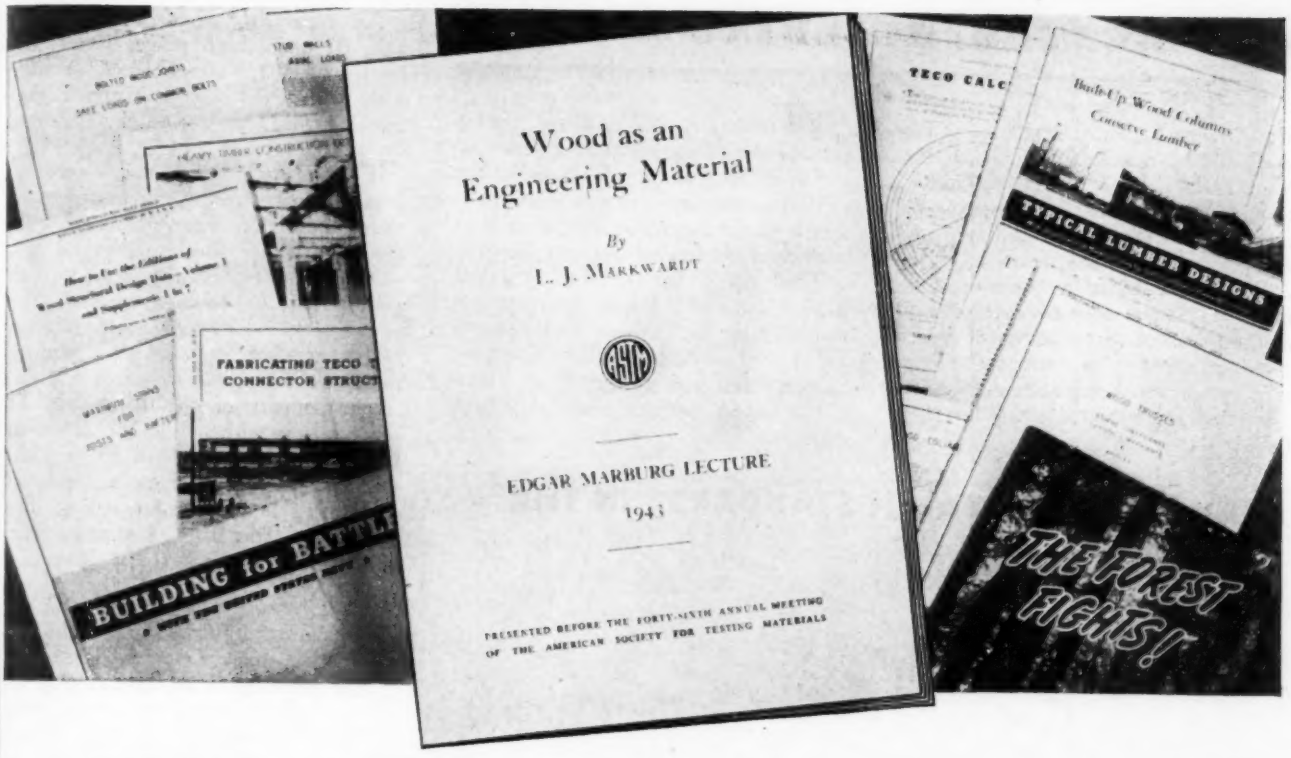
Designed by Chas. F. J. Schied, Bramhall, Deane Co.

THE No. 959 BLODGETT ROASTING UNIT in this installation has two sections, one with two 7"-high compartments and one with one 12"-high compartment, each section separately heated. Twenty-eight sq. ft. of shelf area are provided. THE No. 982 BLODGETT BAKE OVEN is a two-section, four-deck oven, 8-pan, 48-pie capacity. For details and specifications of Blodgett Ovens, consult your equipment house or write

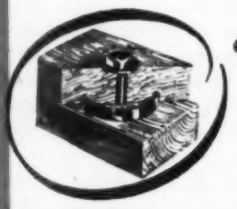
The G. S. BLODGETT CO., Inc.

53 Maple Street **Burlington, Vermont**

Reprints of this series now available to architects on request.



BASIC TIMBER ENGINEERING DATA FOR ARCHITECTS AND ENGINEERS



"WOOD as an Engineering Material," by L. J. Markwardt, distinguished research authority of the U. S. Forest Products Laboratory, was presented at the invitation of the American Society for Testing Materials as the 1943 Edgar Marburg Lecture.

The purpose of this annual lecture is to present outstanding developments in the extension of knowledge of engineering materials.

In continuation of Teco's practice of making latest information on timber available to engineers and architects, copies of this lecture have been obtained and are available on request.

Keep posted on new timber design developments. Use the *Teco* Services and *Teco* Timber Connectors and Tools.

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Please send me by return mail a Free copy of *"Wood As An Engineering Material"*.

Name.....

Firm Name.....

City.....State.....

 (Continued from page 96)

watt Mazda F lamps. The hood is fabricated from sheet steel with all ballasts, lamp holders and starter sockets mounted and wired as part of the channel assembly. New sliding hangers permit suspension from any part of the hood. The moisture-resistant, non-metallic reflectors are covered with a multi-coat polymerized finish which provides a reflection factor of 85 per cent or more. Westinghouse Lighting Division, Edgewater Park, Cleveland, Ohio.

The *Warrior,* designed for use in general offices and drafting rooms. Individual units are available either for ceiling mounting or as pendants. The ceiling-mounting luminaire can also be used as a continuous line.

The steel channel and pendant hanger are finished light gray. Louver assembly, ballast shields and reflector are made of non-metallic "Fluratex" and are finished glossy white Fluracite, a baked synthetic material of high reflection factor.

All types are wired with 110-120 volt, 60 cycle, high power factor, tu-lamp ballasts, lampholders, starter sockets and FS-4 starters. Curtis Lighting, Inc., 6135 West 65th St., Chicago.

The *Parkway* and the *Crusader,* available for direct ceiling or suspension mounting, and the *4-Star,* available for suspension mounting only.

The Crusader features a new type of plastic used in the side panels. The entire body is snapped to the chassis by means of spring clips and requires but a few seconds to install or remove.

The louvers of the 4-Star can be hinged from either side for access to lamps and starters. Said to be ideal for office lighting where an indirect component is desired for ceiling illumination. Day-Brite Lighting, Inc., 5411 Bulwer Ave., St. Louis, Mo.

The *Aristolite* and the *Futurliter,* for use in offices, drafting-rooms and other commercial areas.

The Aristolite is a glass-diffusing luminaire, available in sizes for two, three and four 40-watt lamps. The special lens-design glass utilized is said to "break-up" the rays to satisfactory brightness levels, yet to have high transmission qualities. The steel housing totally encloses all accessories and wiring.

The Futurliter is an eggcrate lamp-shielding luminaire featuring low maintenance cost. It can be mounted singly, or end-to-end in continuous runs for 50 to 75 foot-candle installations. Each 48-in. unit can be had for use with either two or three 40-watt lamps.

Both units are designed for either close-ceiling or ceiling-suspensions. The Edwin F. Guth Co., 2615 Washington Ave., St. Louis, Mo.

EFFECTIVE INSULATION

Approximately 70,000 sq. ft. of Fiberglas will insulate the huge altitude wind tunnel for research on aircraft engines now being built at the Cleveland Airport by the National Advisory Committee for Aeronautics. The insulation, in the form of metal-mesh blankets 2½ in. thick, is placed between an inner steel shell ranging from ½ to 15/16 in. in thickness, and the outer skin of the tunnel consisting of ⅛ in. thick welded steel plates. The Fiberglas was manufactured by Owens-Corning Fiberglas Corp. and supplied through Crane Co.

SLIDE RULES

Three new slide rules—one for the professional draftsman, one for the apprentice draftsman or student, and one a handy 5-in. pocket rule—are available now, it has been announced.

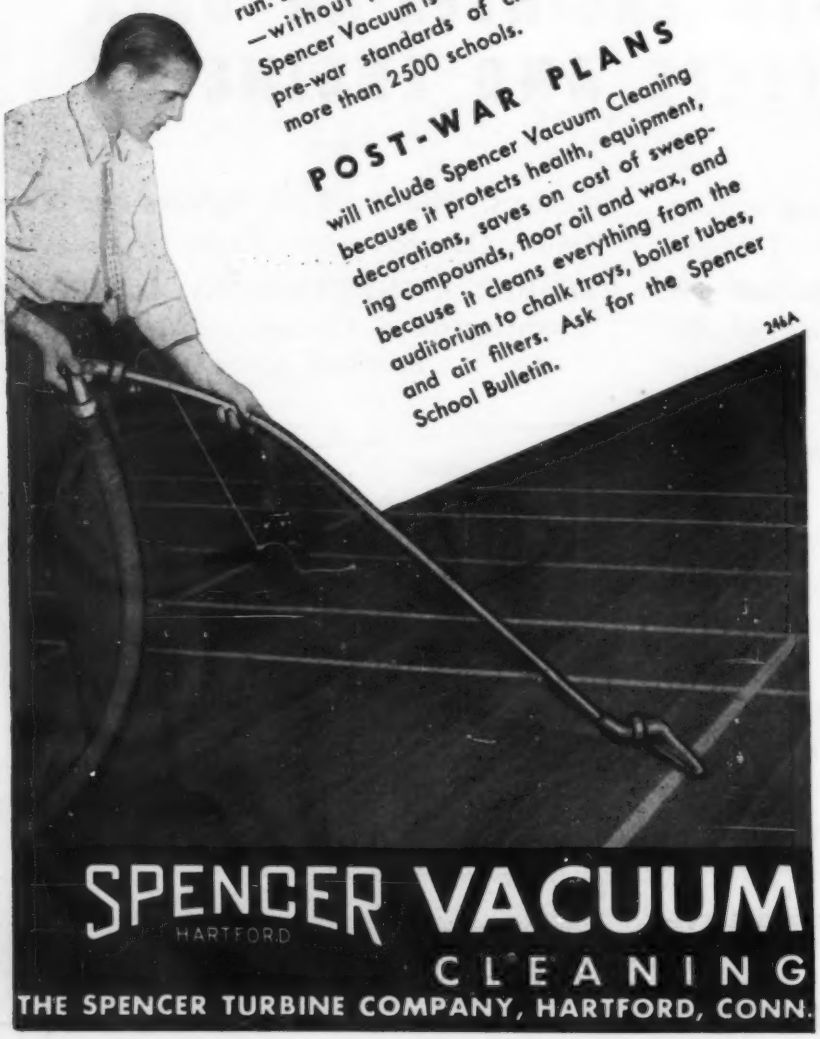
(Continued on page 100)

MAINTAINING HEALTH STANDARDS IN THE NATION'S SCHOOLS

Spencer Vacuum is the accepted standard for cleaning modern schools. It picks up more of the dirt and dust, works faster and costs less in the long run. Easily operated by men or women —without previous experience, Spencer Vacuum is helping to maintain pre-war standards of cleanliness in more than 2500 schools.

POST-WAR PLANS

will include Spencer Vacuum Cleaning because it protects health, equipment, decorations, saves on cost of sweeping compounds, floor oil and wax, and because it cleans everything from the auditorium to chalk trays, boiler tubes, and air filters. Ask for the Spencer School Bulletin.



244A

SPENCER HARTFORD VACUUM CLEANING

THE SPENCER TURBINE COMPANY, HARTFORD, CONN.

Specify

AR-KE-TEX

CERAMIC GLAZED STRUCTURAL TILE

for

HOTEL WALLS

of

Permanent

BEAUTY
STRENGTH
ECONOMY
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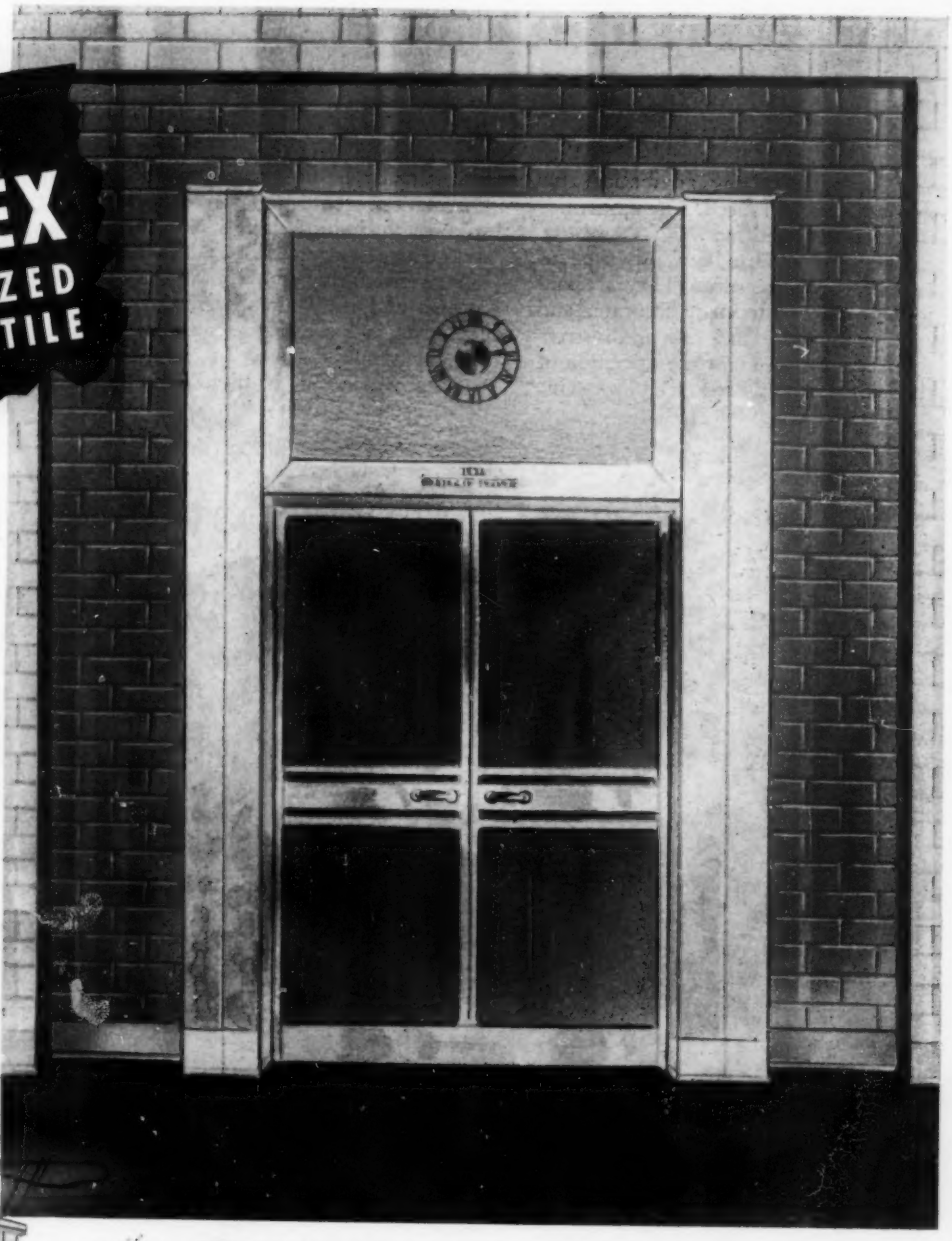


BUILD faster and better . . . eliminate the expense of periodic re-finishing or painting. Specify AR-KE-TEX Ceramic Glazed Structural Tile — wall and finish *all-in-one.* AR-KE-TEX dozen colors are everlasting . . . its glazed, impenetrable surface impervious to the effects of moisture, acids, alkalis, oils or grease . . . its adaptability unlimited . . . and AR-KE-TEX actually provides insulation against passage of heat and sound. All of these structural advantages are available today. Our new Circular Continuous Kiln is producing the finest AR-KE-TEX Ceramic Glazed Structural Tile in history — and in two-thirds the former time! That's why definite shipping promises can be furnished within 24 hours after receipt of your inquiry.

BETTER WALLS • WITH AR-KE-TEX CERAMIC GLAZED STRUCTURAL TILE

AR-KE-TEX
ART-KERAMIC-TEXTURES

ARKETEX CERAMIC CORPORATION • BRAZIL, INDIANA

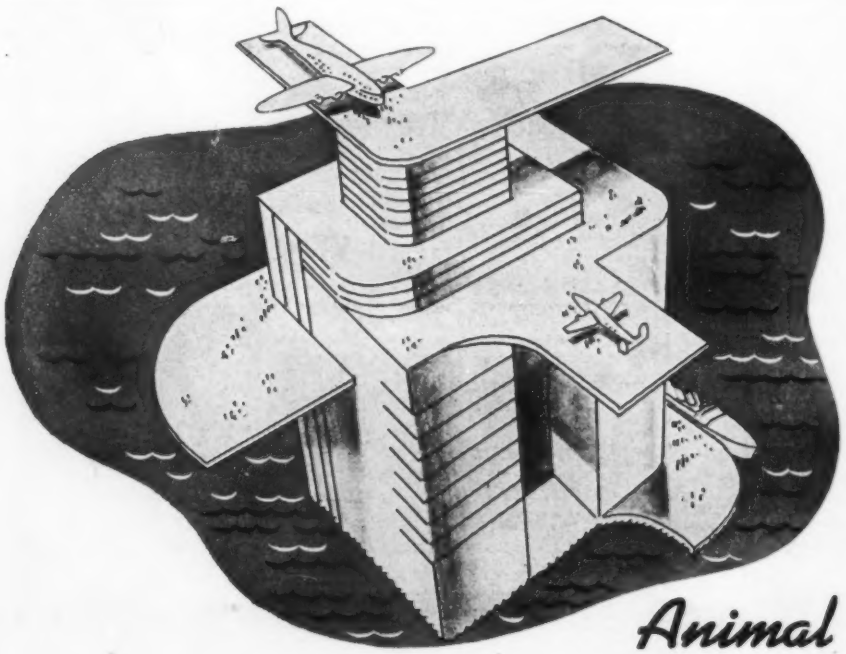
 (Continued from page 98)

All three rules contain the scales A, B, C, D, CI, K, S, L and T. With the exception of the apprentice rule they are celluloid faced. The apprentice rule has a painted face.

These rules have been produced as an emergency measure. They are said to be well constructed, accurate, and come equipped with a case and instruction sheet on the complete operation of the slide rule. Frederick Post Co., Box 803, Chicago 90.

AIR BLASTER

After the first of the year a new fan unit called the *Air Blaster* will be on the market. Said to deliver a large volume of air in a straight line to the spot where it is needed, and to reach more effectively into out-of-the-way corners and dead air spaces, the unit consists of a heavy gauge welded steel housing, mounted on an adjustable pedestal which may be tilted 60° up or down. It is driven by a direct connected, ball bearing motor. It is planned for use in steel mills, foundries, shipholds and forge rooms, meat packing and cold storage plants, freezers and dairies, etc., and for cooling condensers, ammonia compressors and transformers. Chelsea Fan & Blower Co., Inc., 1206 Grove St., Irvington, N. J.



Animal
—Vegetable—or Mineral?

Sea-going hotels—land-locked carriers? Not as fantastic as it seems. But let's leave that for the seers, sages and sorcerers whose job it is to compound the proper formula and popular panaceas designed to beget post-war prosperity. Our job's giving a guy (and his products) a lift—and figuring new ways to do the job better and faster.

For example, take the aircraft carrier. The Navy needed special elevators to lift planes from the ship's belly to the flight deck—*fast*. They had to be large—carry a tremendous load—and line up flush with the flight deck.

We made them!

Similarly, men concerned with post-war plans for hotels, hospitals, schools, factories, airports and the like, are or will be confronted with problems of proper vertical transportation. If you're one of these men . . . if your lifting and hoisting problems seem insurmountable—*let us know about them.*

Our engineers will be happy to help work out the solution and show you how Sedgwick specialized equipment provides safer, surer, more economical lifting and hoisting.

"MEN WHO KNOW ARE SOLD ON SEDGWICK"

Sedgwick MACHINE WORKS, INC.

142 WEST 15th STREET NEW YORK 11, N. Y.

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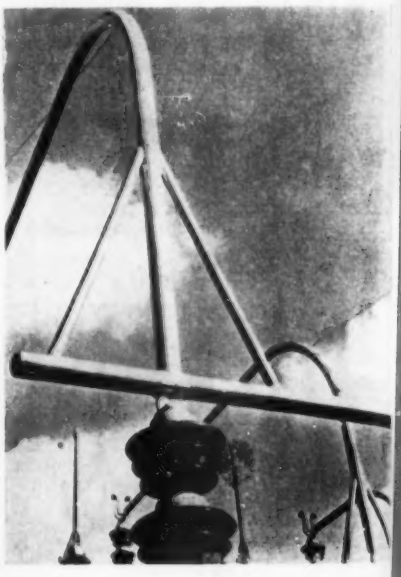


Detail of the welded wrought iron pipe bus connection at Bonneville

WROUGHT IRON BUSES

The first recorded installation of wrought iron electrical buses has been announced by engineers of the Bonneville Power Administration.

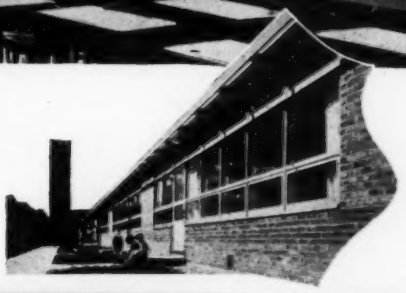
According to J. A. Gerber, assistant engineer at Bonneville, the wrought iron is a capable substitute for war scarce copper and aluminum, but need not be classified as an "ersatz" material as "there are many points in favor of using it for permanent buses."

The buses were finished by first removing the protective asphalt varnish from the pipe and by cleaning it with an abrasive, then applying a coat of synthetic red lead and two coats of aluminum paint.

GLASS SINK

Developed by William H. Ham, of the Bridgeport Housing Co., in cooperation with the Libbey-Owens-Ford Glass Co. for use in a large apartment housing development in Bridgeport, Conn., a new type of sink of Vitrolite specially heat-tempered to provide extra strength, employs only 1¾ lb. of critical metal exclusive of piping fixtures. It can withstand heavy blows and shocks, it is reported, and does not chip. A damp cloth rubbed lightly over the surface eliminates stains and grease from the non-porous and non-absorbent surface. The sink is being produced in black and a wide range of pastel

DAYLIGHT ENGINEERING IN THE MODERN SCHOOL



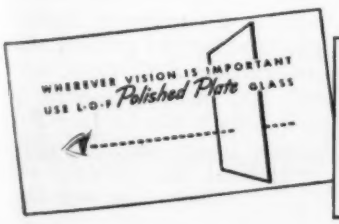
This recently completed midwestern school, designed by Perkins, Wheeler & Will, noted Chicago architects, sets the pattern for educational institutions of the future. The principles of *Daylight Engineering* are a paramount feature of its design.

Eye comfort for pupils is substantially stepped up through carefully planned utilization of natural light. Daylight is evenly distributed throughout the classrooms, directed to walls and ceilings in a way that eliminates dark corners and eye-fatiguing shadows.

Supplementing the large window areas, on the opposite wall are clerestory windows scientifically designed to capture and distribute added daylight.

In homes and offices, as well as schools, *Daylight Engineering* opens up entirely new opportunities to make interiors brighter, cheerful and more spacious in appearance. Here is one modern building feature that every home, large or small, can enjoy, for it costs no more to design and build with glass.

Many kinds of high quality Libbey·Owens·Ford Glass for windows, and Blue Ridge Glass for partitions are available for every *Daylight Engineering* need. Libbey·Owens·Ford Glass Company, 1014 Nicholas Building, Toledo 3, Ohio.



L O F

LIBBEY·OWENS·FORD

A GREAT NAME IN *Glass*

 (Continued from page 10)

it is more likely to be honored in practice than by formal order.

WPB has published a series of questions and answers on Order L-41 dealing with dozens of marginal cases which actually came up.

◆ ◆ ◆

COOPERATION IN HOUSING

Effective preparations for a postwar housing program that will achieve and maintain a production rate of a million or more new houses a year will require close cooperation between industry and government in the housing field as well as early decisions by communities on how much and what kind of housing they will need, John B. Blandford, Jr., Administrator of the NHA has declared.

While a big war housing job is still to be done, Mr. Blandford said, industry, communities and the federal government must begin now to develop concrete plans and programs for the peacetime period if postwar housing is to be the huge outlet for jobs, materials and investments that seems to be generally expected.

PUBLIC POLICY ON CONSTRUCTION

Early action by Congress on a policy respecting the position of the construction industry and public works in the postwar program was urged by Eric A. Johnston, president of the U. S. Chamber of Commerce, speaking before the House Committee on Public Buildings and Grounds last month.

Mr. Johnston favors adoption of a policy making clear to the country the following principles:

"1. That Congress looks to the construction industry to eliminate its own peaks and valleys so far as possible and in that way to make its own contribution to providing useful employment, and does not expect that industry to stabilize our own economy.

"2. That Congress expects the city, county and state governments to finance their own ordinary local public works, such as water systems, street improvements, educational buildings and recreational facilities.

"3. That the federal government will correlate its own proper public works expenditures through a suitable agency, in order that there may be certainty in regard to what the federal government is going to do, and elimination of wasteful expenditures.

"4. That the federal government's public works will be undertaken through the contract method of public construction.

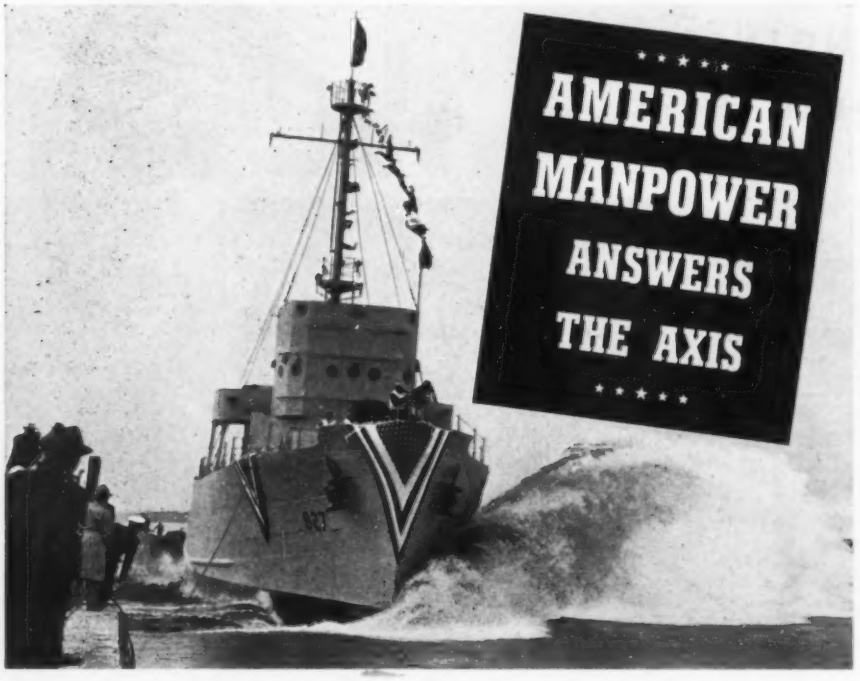
"5. That the federal government will not undertake any activities in the field of housing which will compete with private builders or interfere with the community's responsibility for the enforcement of minimum housing standards and the relief of needy families."

PLAN NOW OR ELSE . . .

Many thousands of families hoping to acquire new homes immediately after the war face prolonged delay and disappointment unless they complete soon arrangements for starting construction at the first opportunity, according to a statement by Russell Creviston, general postwar chairman of the Producers' Council.

As soon as wartime restrictions on residential construction are removed, builders, architects, contractors and material and equipment dealers will be swamped by the pent-up demand for construction of all types, with the result that many prospective buyers of new houses will be forced to wait a year or more before their hopes can be realized, Mr. Creviston said.

(Continued on page 104)



Dunham Gives Winter Protection to Workers

Ever hear of "arbitrary weather"? It's the kind of weather which protects workers on American production lines. It's *inside* weather arbitrarily governed by Dunham Differential Heating to maintain comfortable, healthful working quarters. Temperatures and volume of steam admitted to the radiation are automatically varied to meet changing *outside* weather conditions.

And, not only does this "arbitrary weather" *(balanced* heating) protect the worker, but it helps him both in the quality and quantity of his output. Today, Dunham equipment plays its part in protecting millions of men and women working side by side in Government buildings, ordnance plants, cantonments, airplane hangars, hospitals and factories, and in giving warmth to men at sea. Dunham has built heating equipment to meet the nation's war-years' requirements. This same sound heating principle now conserving fuel in war plants will be available in buildings and ships heated by Dunham after the war.

Dunham differential Heating stretches the heat values of steam and advances fuel economies far beyond ordinary concepts. For details write to our Chicago office.

C. A. DUNHAM COMPANY
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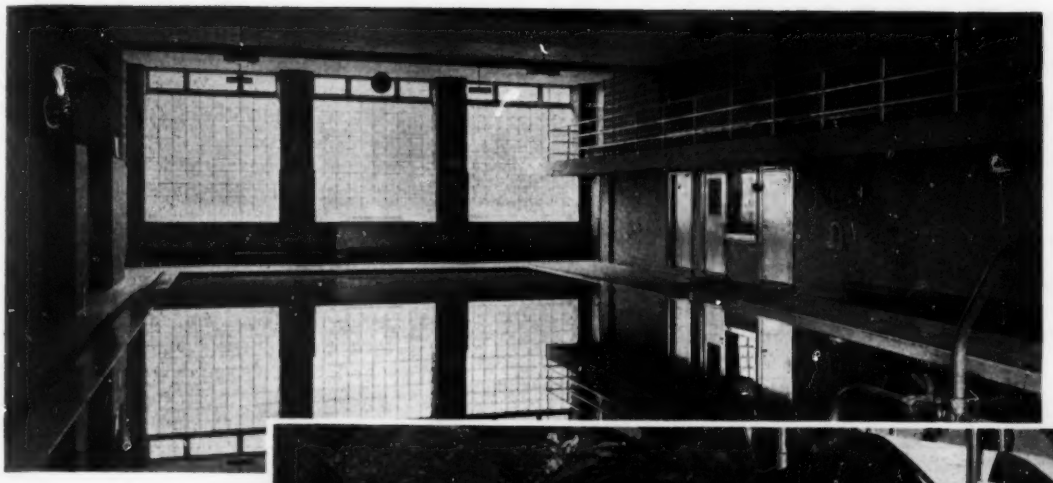

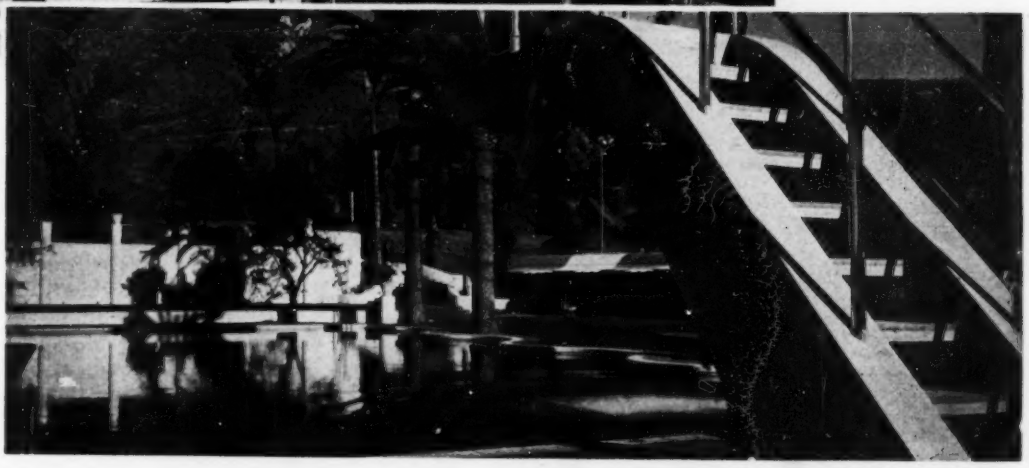

IN HOTEL POOLS from NORTH to SOUTH . . . THEY SWIM in WATER FIT to DRINK

Whether for the swimming pool of the metropolitan hotel or of the resort hotel, architects have specified Wallace & Tiernan Chlorinators for sterilization of the water. They provide absolute health protection, shielding countless bathers —many of whom are men in the service —from the danger of water-borne infection. W & T Chlorinators are accurate, and efficient, and give years of dependable service at minimum maintenance expense.

War production has rightly set up priorities which make new W & T Chlorinators unavailable for hotels for the duration. But meantime the Wallace & Tiernan organization is keeping present installations in top working condition, thereby insuring safety for swimmers.

Many architects and engineers are taking advantage of this nation-wide service. Ask us about it, also for the Wallace & Tiernan Swimming Pool Technical Publications which review water treatment for all types of pools.

WALLACE & TIERNAN

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Manufacturers of Chlorine and Ammonia Control Apparatus

NEWARK 1, NEW JERSEY — **Represented in Principal Cities**

THE RECORD REPORTS (Continued from page 102)

PUBLIC SAFETY LAW EXPLAINED

At the December meeting of the Boston Society of Architects the new Massachusetts public safety law, in effect since September 10, was explained and discussed by George C. Parsons, Chief of Division of Inspection, representing the Public Safety Commissioner, and Harry Atkinson, Supervisor of Plans for the Commission.

President William Roger Greeley of the Boston Society recalled in introducing the speakers, that following the Cocoanut Grove tragedy last year the Society had passed a resolution calling upon the Governor to do something to assure public safety in Massachusetts. The new law was passed as a result of this and other demands.

The law covers the following points, as reported in the minutes of the Boston meeting:

"1. The City of Boston now comes under the jurisdiction of the State Department of Public Safety for the first time as far as places of public assembly are concerned. State and City laws did not coincide before and licensing of theatres is now the duty of the Commissioner instead of the mayor of Boston. Plans have to be approved by the State Commissioner before going to the City Building Department and Mr. Atkinson is requiring that these plans be submitted by *architects*.

"2. The State Commissioner has jurisdiction but the municipality or town must inspect and see that the State Law is obeyed. Every community, however small, must appoint someone to be responsible for this duty: a building inspector, a fire chief or perhaps a selectman. If it fails, the Commissioner will act.

"3. There is set up within the Department of Public Safety a 'Board of Standards and Appeals.' This Board can change standards of materials as time goes on and more is learned about such materials as plastics, alloys, etc. The Board also promulgates regulations within the general law and receives appeals.

"4. The law covers every kind of building where the public assemble and this now for the first time is construed to mean restaurants serving 50 or more persons and places where liquor is consumed on the premises. Mr. Parsons said that this meant that nearly every building type except single and two-family houses came under the law.

"5. The new law does not recognize fire limits in a city. A wood building could be built in the center of a city if it had enough land around it. It is planned to encourage sprinkler systems by allowing more leniency in construction when they are installed.

"6. Existing buildings are required to be made safe.

"7. Revolving doors will be prohibited in places of public assembly after July 1, 1945.

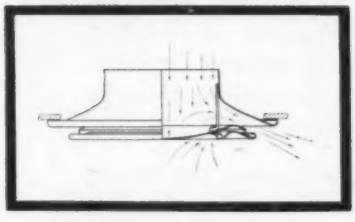
"8. The State Legislature has a Recess Committee studying further changes in law."

WPB RELEASES COPPER

The War Production Board has released approximately 3,000,000 lb. of fabricated copper and copper base alloy parts for use in the manufacture of builders' finishing hardware, cabinet locks and padlocks. Action is taken through issuance of an amended version of Schedule I of Order L-236 (Hardware Simplification), which permits the use of such fabricated parts as were held in inventory on November 30, 1943 (date of issue).

Such parts, however, may be used only for items conforming to the sim-

(Continued on page 106)



CROSS-SECTION OF UNIT

As shown by arrows, mixed and diffused air is discharged in a slightly downward direction. VENTURI-FLO units are made in a wide variety of sizes, capacities, and finishes, for various types of service. Selection of the proper unit is based on comprehensive data, and satisfactory performance is *guaranteed*.

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THE internal construction of VENTURI-FLO Overhead Air Diffusers makes use of the Venturi principle to obtain a suction effect which mixes room air with the supply air. A properly mixed and thoroughly diffused flow of air is discharged uniformly around the periphery in all directions. There is a minimum pressure drop and an extremely low noise level. They are adaptable to all air supply systems employing overhead outlets, and have an unobtrusive, pleasing appearance. For complete information, see our catalog of Grilles, Registers, and Air Diffusers.

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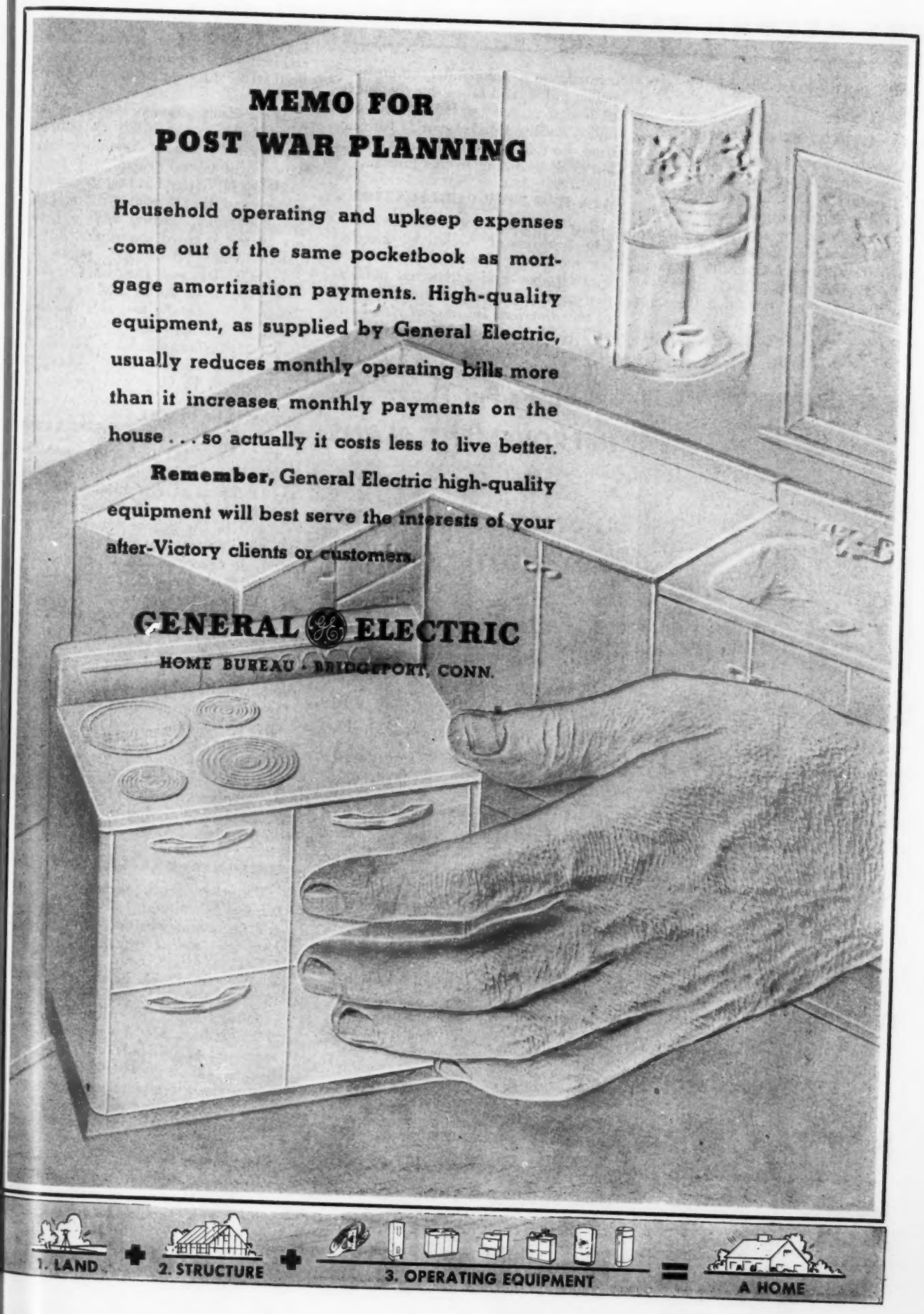
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Household operating and upkeep expenses come out of the same pocketbook as mortgage amortization payments. High-quality equipment, as supplied by General Electric, usually reduces monthly operating bills more than it increases monthly payments on the house . . . so actually it costs less to live better.
Remember, General Electric high-quality equipment will best serve the interests of your after-Victory clients or customers.
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HOME BUREAU · BRIDGEPORT, CONN.
1. LAND
2. STRUCTURE
3. OPERATING EQUIPMENT
A HOME

plified practices established by the Schedule.

CONSTRUCTION OUTLOOK

A sharp upturn in all branches of private construction during the last six months of 1944 is the Producers' Council prediction if an armistice with Germany should be arranged by July 1. This conclusion is based on a forecast prepared by the Council's Market Analysis Committee.

In the event, however, that the war in Europe continues past the middle of the year, the volume of new private construction — residential, industrial, public utility, and farm—for the whole of 1944 is expected to fall to about one billion dollars, a decrease of 38 per cent from the total of $1.6 billion estimated for 1943, according to this forecast.

AIA HAS NEW PUBLICATION

The Board of Directors of the American Institute of Architects, meeting last month in Memphis, discontinued *The Octagon* and authorized publication of a more comprehensive *Journal of the American Institute of Architects* as The Institute's official organ.

Of pocket size, printed partly on antique paper, partly on coated, the *Journal* will "discuss problems of the architect's practice and the wider ramifications of his relationship to society in general."

The Board's action followed preliminary study of The Institute's publication needs by various committees over a period of several years.

Henry H. Saylor has been appointed editor, and the Journal will be published monthly, starting with a January issue. A board committee of Edgar Williams (chairman), James R. Edmunds, Jr., and Douglas Orr has been formed to act as advisor to the editor and generally to guide the destinies of the *Journal*. Editorial and publication offices will be at The Institute's headquarters, The Octagon, Washington, D. C.

ARCHITECTURAL GRADUATES

Only 10 of 112 recent graduates in architecture at the University of Minnesota School of Architecture are engaged in private architectural practice, a check of the School records has revealed. Fourteen are employed by government agencies, 22 by private non-architectural agencies, and 66 are in the Armed Forces.

The record includes only those students graduating with degrees in architecture during the nine-year period beginning with the fall of 1935 and ending with the fall of 1943. No information was obtainable on 31 of those graduates.

Almost all of those in service are commissioned officers, Professor Roy Jones, head of the School points out, and a large proportion of those in service are in engineering or other technical branches.

EDISON MEDAL AWARDED

Vannevar Bush, president of the Carnegie Institution of Washington, and Director of the Office of Scientific Research and Development of the Office of Emergency Management, Washington, D. C., has been awarded the 1943 Edison Medal of the American Institute of Electrical Engineers.

The Edison Medal was founded by associates and friends of Thomas A. Edison, and is awarded annually for "meritorious achievement in electrical science, electrical engineering, or the electrical arts." This year's award goes to Dr. Bush "for his contribution to the advancement of electrical engineering, particularly through the development of new applications of mathematics to engineering problems, and for his eminent service to the Nation in guiding the war research program." The

(Continued on page 108)

Let's Put Those IMPROVEMENT PLANS for HOTELS, RESTAURANTS INSTITUTIONS on Paper—*NOW*

Right now—while your clients' equipment is doing a man-size war job—it's time to plan the improvements they'll need when the war is over. Our engineers, backed by over 90 years of kitchen equipment manufacturing, food service and interior furnishings planning, are well qualified to help you, upon request. This way, plans will be ready when the equipment is available, with less risk of delays. So let's start *doing something about it.*

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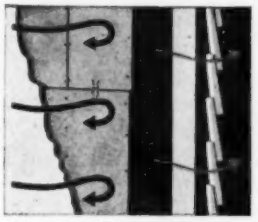
• Insulite Bildrite Sheathing forms the outer wall of the Insulite Approved Wall of Protection. The big boards provide a windproofed, waterproofed, and weathertight wall. The large Bildrite boards are easily and quickly applied.

• Inner walls— Insulite Sealed Lok-Joint Lath provides a second wall of insulation. The patented "Lok-Joint" provides a strong, rigid plastering surface. Each 18" by 48" unit has three heavy galvanized "loks" to space midway between studs.



• How moisture condensation is eliminated in the Insulite Approved Wall of Protection: Sealed Lok-Joint Lath, with asphalt barrier against the studs, effectively retards vapor travel. Bildrite Sheathing, being permeable to vapor, permits what little vapor escapes the barrier to pass naturally toward the outside.

Soon you will again be designing homes.

Homes for Captain Tom, just home from the war. Homes for Bill and Mary, whose years of grind in a defense plant resulted in the handful of bonds they're planning to convert into a new home.

In tomorrow's homes, modern air-conditioning will put new demands on the *walls.*

Moisture condensation within the walls presents a grave danger unless avoided when the *house is built.*

If you build with the Insulite Approved Wall of Protection you meet every one of tomorrow's demands. With this wall you build: . . . *A wall of double insulation . . . A wall of superior bracing strength . . . A wall protected against internal moisture condensation.*

Let us tell you about the Insulite Approved Wall of Protection in detail. Write today for complete technical information. Insulite division, Minnesota and Ontario Paper Company, Minneapolis, Minnesota.

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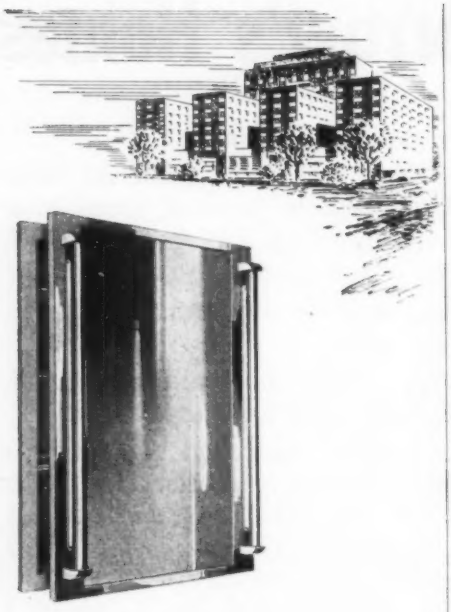


Bathroom Fixtures for Post War Use

Parker is ready, the minute war restrictions are removed, to start manufacturing bathroom fixtures again. No time will be lost in getting into production, for the tools are available and the styles and designs have already been selected.

You, who are planning for the "Hotels of Tomorrow," have available to you now, complete and specific information about Parker's Fixture production plans for the immediate post war era. Architects may go ahead with their blue prints and specifications with the assurance that bathroom fixtures will be ready when they need them.

Consult Sweets Architectural File for our new catalog of "Bathroom Fixtures For Immediate Post War Use" or write direct to: The Charles Parker Company, Meriden, Conn.

PARKER

THE RECORD REPORTS

(Continued from page 106)

medal will be presented on January 26 in a general session of the winter technical meeting of the Institute.

HOSPITAL COMPETITION

Preliminary announcement has been made of a design competition for a 320-bed tuberculosis sanatorium for Ireland. Competition conditions may be had on application to City Manager and Town Clerk, Corp. of Dublin, Public Health Dept., Municipal Bldgs., Dublin. Required deposit £3 3s.; deadline March 13.

J. H. FREEDLANDER

With the death late in November of Joseph H. Freedlander, New York has lost one of its best known public buildings architects.

Architect for the Georgian Colonial-styled Museum of the City of New York, on Fifth Avenue between 103rd and 104th Streets, Mr. Freedlander won architectural competitions in many parts of the country. Among his prize-winning designs were those for the Perry Memorial at Put-In-Bay on Lake Erie, Ohio, and the Portland, Oregon, Auditorium.

Among his other designs were the $8,000,000 Bronx County Courthouse in New York, the Bronx County jail, the buildings of the Saratoga Spa, and New York's Fifth Ave. traffic towers.

HAROLD KINGSLEY FERGUSON

The death on December 9 of Harold Kingsley Ferguson, founder and president of the H. K. Ferguson Co. of Cleveland, brought to a close a long and brilliant career in the field of industrial building. He was the proponent of two main theories in building: first, the standard factory principle, which provided for building plants from stock plans with prefabricated structural steel; and second, the assembling of an organization which could complete an industrial plant—designing, building and equipment—without sub-contracts. His factory principle was instrumental in breaking the bottlenecks of the first World War.

A graduate of Ohio Wesleyan University, Mr. Ferguson founded his own company in 1918. Among his subsequent regular "customers" were General Foods, Firestone Tire and Rubber, Procter & Gamble, Union Carbide & Carbon Co., H. J. Heinz Foods. The company built a synthetic rubber plant in 20 weeks shortly after the beginning of the present war—a proud record.

How you can get more heat with less fuel

In *normal* times fuel conservation is figured in dollars saved. But not so now. This is war . . . Today Uncle Sam allots to building owners in rationed areas a certain amount of fuel—and it's up to him to get along as best he can *within that ration.*

Seven out of ten large buildings in America (many less than ten years old) can get up to 33 per cent more heat out of the fuel consumed!

We didn't pick that figure out of the air. We've got the facts to back it. Webster Engineers surveyed thousands of buildings to give owners an accurate estimate of the extra-heat-per-unit-of-fuel to be achieved with a Webster Heating Modernization Program.

Take the first step now toward getting more heat out of your fuel ration next winter. Write today for "Performance Facts," a free booklet containing case studies of 268 modern steam heating installations—"before-and-after" facts as told by the building owners themselves.

WARREN WEBSTER & CO., Camden, N. J.
Pioneers of the Vacuum System of Steam Heating
Representatives in principal Cities : : Est. 18

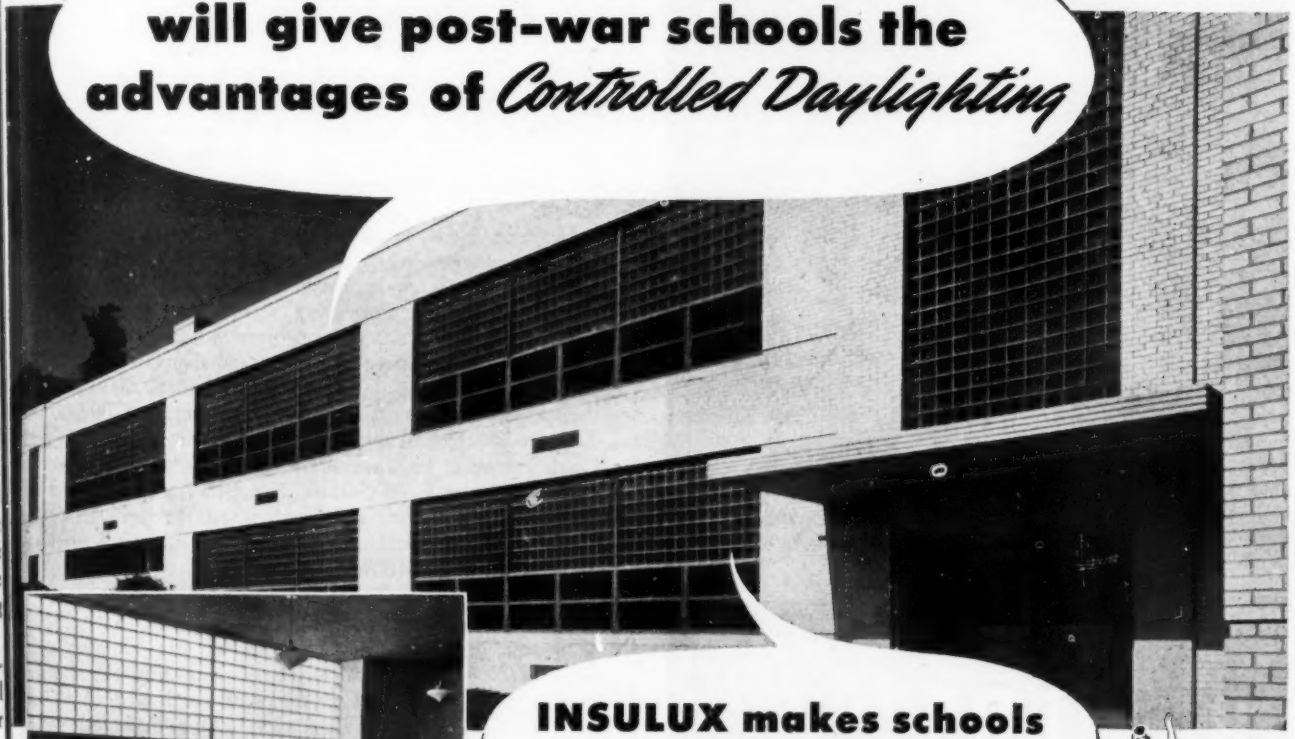
Shown above is the small Control Cabinet of a Webster EH-10 Moderator System central heat control of the pulsating flow type. It can be used to automatically operate a motorized valve in steam mains or directly control burner or stoker of your boiler.

ARMY E NAVY

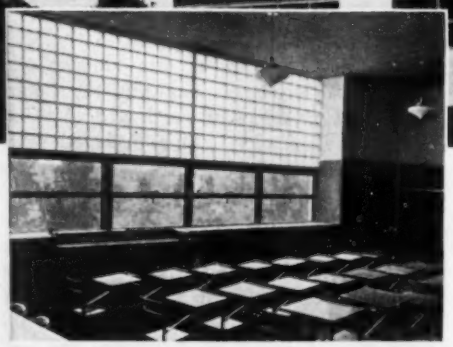
Making Boosters for U.S. Army Ordnance

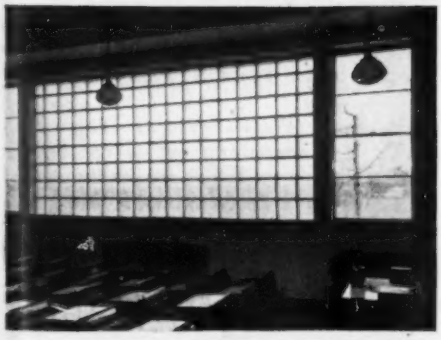
Webster Steam Heating

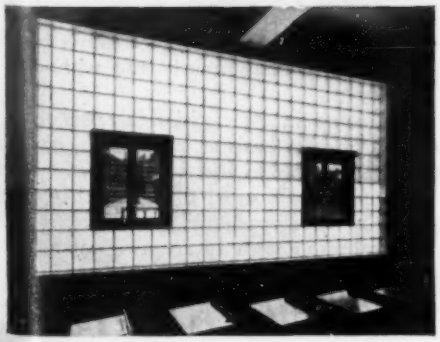
INSULUX GLASS BLOCK will give post-war schools the advantages of *Controlled Daylighting*



INSULUX makes schools easier to heat, too







The bottom photograph shows a St. Louis, Mo., high school classroom remodeled with INSULUX. Wood sash can be replaced with metal after the war.

INSULUX Glass Block panels provide ideal light-transmitting areas for schools. Architects who specify INSULUX Light-Directional Glass Block can control the amount and distribution of natural light entering classrooms, libraries, halls, stairways, cafeterias.

Glass Block panels can be used in various combinations with windows for ventilation and vision, as shown in the three small photographs. Probably the most ideal combination is the one with windows below the panels. Light-Directional Glass Block in the panels above the windows direct the major portion of the light for all sun angles upward to the ceiling, which reflects this light downward, deep into the room.

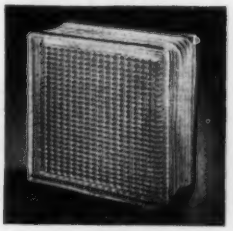
Walls of INSULUX Glass Block not only flood interiors with natural daylight, but provide insulation which reduces heating costs. INSULUX is easy to clean . . . highly resistant to damage . . . fireproof.

For technical data, specifications, and installation details, see our section in Sweet's Architectural Catalog, or write: INSULUX Products Division, Dept. 110, Owens-Illinois Glass Company, Toledo, Ohio.

OWENS-ILLINOIS

INSULUX

GLASS BLOCK



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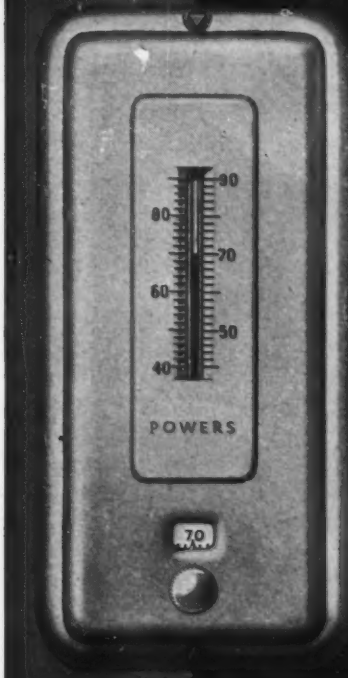
has been an outstanding feature of Powers regulation since 1891. With this type of control, valves or dampers are opened or closed **gradually**, which results in exceedingly close regulation and the maximum of comfort obtainable with automatic control.



● THE POWERS REGULATOR CO., 2752 Greenview Ave., Chicago—231 E. 46th St., New York. Offices in 47 Cities. 43

WRITE FOR BULLETIN NO. 200

POWERS TEMPERATURE *and* HUMIDITY CONTROL

Abesto

OUR TOAST TO YOU FOR 1944 IS "BETTER BUILDING FOR A BETTER FUTURE!"

Abesto Cold Process roof construction is an important part of the blueprints for tomorrow's building.

Our exclusive base formulae offer the designers of roofs a material for built-up construction that assures close bonding of laminations because it is extremely adhesive—assures complete freedom from cracking or checking because it has the quality of "cured elasticity" and assures a long term service because it is highly resistant to oxidation.

Abesto is applied cold thus eliminating expensive heating equipment and the danger of coked felts. It saves time and labor costs.

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ABESTO MANUFACTURING CO.
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PRIVATE PRACTICE CHALLENGED

By Charles C. Platt, Chairman
Committee on Legislation,
New York Chapter, A. I. A.

THE ENDEAVOR, here in the New York sector, of Civil Service groups to eliminate the private architect and engineer from the planning of public works goes on apace. We meet it each year in Albany in the shape of bills in the State Legislature—and each year these bills are defeated.

Here in New York City this hostile activity has recently quickened its pace and increased its volume due largely to the huge appropriation the city has made for architectural and engineering services in order to have plans for postwar construction prepared and ready to meet the employment emergency. This total appropriation for professional services aggregates more than $22,000,000 and the postwar construction program exceeds $700,000,000. This has created a contest between the professions and the Civil Service as to what share each should receive of this work; and the Civil Service interests have attacked the award of any of this public work to the private practitioner in three different ways—two by litigation and one by attempted legislation.

The first attack came early in the spring in the shape of a suit instituted in the name of one Hardecker, a Civil Service employee, and others, including the Federation of Associations of Employees of the Board of Education, vs. the Board of Education. This involved school buildings only; and the professions intervened in the capacity of "amicus curiae," or "friend of the court," in order to add their weight to the defense the city was setting up. The suit was instituted under the State Education Law, which reads to the effect that the bureaus of the Board of Education shall design all school buildings in New York City except in "special cases" in which upon the approval of the Board of Estimate, the work "may otherwise be performed." The case hung on the interpretation of "special cases" and Justice Klienfeld of the Supreme Court, in his opinion upon the question stated:

"It would seem that a 'Postwar Works Program' is a special case in that it is something out of the ordinary uncommon and extraordinary. It has for its aim an easy transition from a war to a peace economy immediately following the cessation of hostilities, and particularly the prompt employment of soldiers as they return from the far-flung and widespread battlefronts. Under such circumstances the Court may not give to the words 'special case' a narrow construction which in effect might tend to defeat such laudable purposes."

This decision was appealed to the higher courts and the lower court was sustained unanimously and without further opinion.

Since the lower court in its decision accentuated the war emergency as a primary basis of its findings, no broad definition was laid down as to just what "special cases" would mean in the light of normal times. In that respect further litigation may develop should the Board of Education favor the profession with future assignments after the present emergency is over.

The second suit was instituted by the Civil Service Technical Guild vs. the Mayor and other city officials and was based on the broad grounds of the alleged rights of Civil Service employees under the Constitution of the State

(Continued on page 112)

Speakman

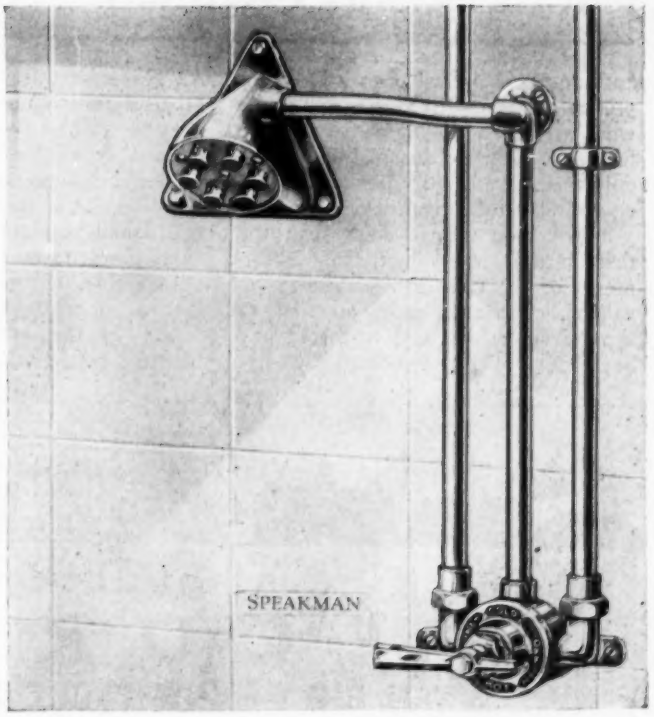
INVITES YOUR IDEAS

THERE are many promises of remarkable advancements in building methods and new uses of many materials for the post-war era. No doubt a great many will take place in time. For Speakman Showers and Fixtures we can see only gradual, progressive changes in fundamental designs, construction features and materials. What you think on this subject is naturally of exceptional interest to us. If you would write us your ideas we'd be grateful.

The Speakman Showers shown here have proved their merit in construction — in performance. These and other types of Speakman Showers and Fixtures illustrated in our pre-war Catalog "S" will be available post-war. Your specifications on future projects can be prepared now with that assurance.

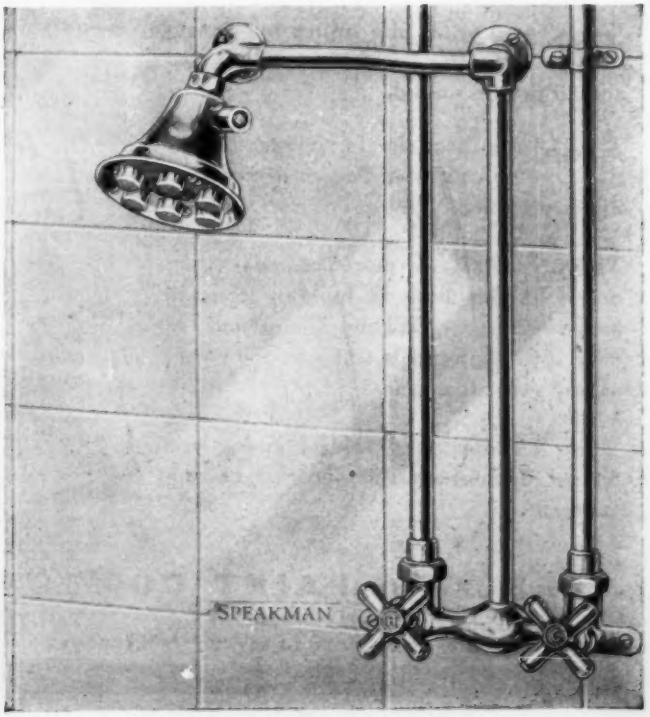
SPEAKMAN COMPANY

WILMINGTON, DELAWARE



● **S-1150** *SPEAKMAN Century Exposed Mixometer Shower. Size, ½ inch. Mixometer with monel metal renewable seats, cast lugs to bolt close against wall, and metal lever handle. Supplies to overhead 36 inches long. Horizontal discharge arm setting head 15 inches off center. Wall-type Anystream Self-Cleaning Shower Head with side inlet. Arm extends either right or left.*

● **S-1160** *SPEAKMAN Century Exposed Two-Valve Shower. Size, ½ inch. Valve center with cast lugs to bolt close against wall. Monel metal renewable seats, swivel discs, encased washers, monel metal washer screws and four-arm metal handles. Supplies to overhead 36 inches long. Horizontal discharge arm setting head 15 inches off center. Close fitting, flanged elbow at each end of arm. Anystream Self-Cleaning Shower Head with lockshield control set at 30° angle. Shower head equipped with lockscrew to prevent malicious removal. Arm extends either right or left.*



PRIVATE PRACTICE CHALLENGED

(Continued from page 110)

and under the Civil Practice Act to preferential employment on public work as long as the Civil Service lists have not been exhausted. Then and only then, it was contended, could the city employ the private practitioner.

This attack went further than the first in that it embraced all departments of the city, and sought to invalidate contracts already awarded to the private offices, and to forbid any payments under those contracts.

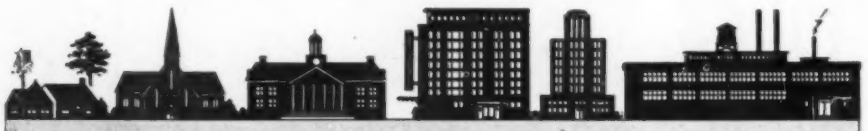
This case was won by the city and the professions in the court of first resort. Justice Pecora, in his opinion, quoted from the State Constitution as follows: "Appointments . . . in the civil service of the state, and . . . cities . . . shall be made according to merit and fitness to be ascertained, so far as practicable, by examinations, which, so far as practical, shall be competitive . . . " He then stated that "the reasons for the action taken by the Board of Estimate, advanced in the answering affidavits, are pertinent only to the question of whether there has been any arbitrary or capricious exercise of a power. The contracts attacked were evidently entered into to meet technical problems which private firms were especially equipped to master, to accelerate the completion of plans, and to assist in preserving intact many private engineering and architectural organizations that would otherwise be dispersed to the great detriment of the city. It is clear from the undisputed facts that the power of the Board of Estimate was wisely exercised, and were this court permitted to review such discretion it would confirm the action taken. There is presented, however, the legal issue of constitutional infraction.

"In approaching the problem certain unmistakable signs along the road point to the correct solution. Since the organization of the City of New York in 1897, it has been a practice, when deemed advisable, to award contracts for private architectural and engineering services. The difficult architectural and engineering problems involved in the construction of public improvements demand the highest degree of specialized professional skill for their solution. The city for years has searched among those with experience and talent to meet the requirements of design and construction called for by the nature of the particular improvements under consideration. This long-standing practice constitutes a practical construction of the constitutional provision dealing with civil service. Whenever the power to award such contracts has been challenged, courts have approved the practice."

The court furthermore stated that "the award of contracts for architectural and engineering work does not constitute a method for making 'appointments' in the 'civil service' of the city. The provisions of the contracts awarded do not create any employer-employee relationship but a contractual one between an independent contractor and the city. The contracts call for specific studies, plans and specifications. The city does not control the office organizations of such firms, has nothing to do with the persons they employ, does not prescribe hours of employment, and is not their sole client."

The court concludes its opinion with the statement that "nothing contained in the Constitution of the State of New York or in the provisions of the Civil Service Law, prohibits the City of New York from awarding contracts for architectural and engineering services to private concerns in connection with the Postwar Planning Program. The

(Continued on page 114)



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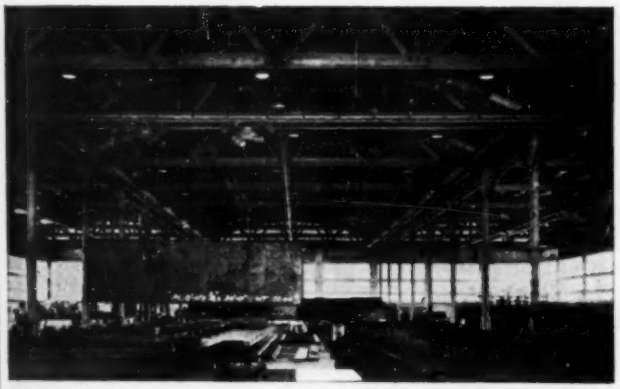
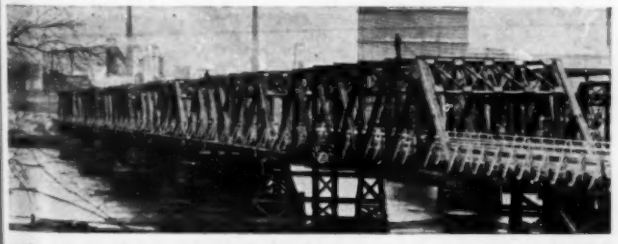


PORTLAND. Steel warehouse for Woodbury & Co. The roof of this 200′x 300′ building is supported by 35-67′ trusses, 15 lb. dead load, 40 lb. live load, plus 14,000 lb. concentration at center line of bottom chord and adjacent to each end of the truss. Concentration supports a three-point suspended traveling crane. Architect: Richard Sundeleaf. Contractor: Wegman & Son.



PITTSBURGH. Fleming Park Bridge—756′ (six 126′ spans) was built for 12-ton trucks and 30-ton street cars. Designed by Allegheny County, Pennsylvania. Detailed, prefabricated by Timber Structures, Inc. Erected by J. F. Casey Co., Inc. and McCrady Construction Co., Aspinwall, Pa. Verne Ketchum, Engineer for Timber Structures, Inc.

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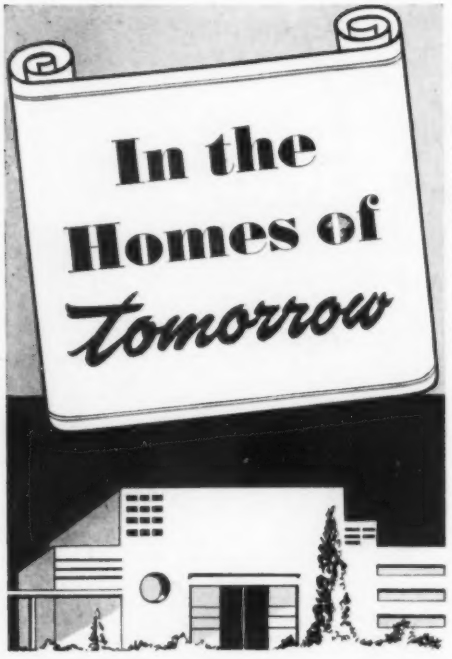

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PRIVATE PRACTICE CHALLENGED

(Continued from page 112)

court further holds that the action of the city attacked herein is in line with sound public policy and represents a wise exercise of discretion."

Running through this opinion, as in the school case opinion, there is also reference to the war emergency and the decision itself expressly sustains these awards "in connection with the postwar planning program." The text of the opinion, however, is based upon more general grounds and would seem to sustain such employment in normal times to a greater extent than does the opinion in the school case. In any event, appeals are to be expected in both litigations and the professions will continue to be represented in defense of their interests.

On a third front, and as an aftermath of the two adverse decisions in the courts, the avenue of legislation has been again opened up and the old bill to bar the professions from the city work was polished up and brought out for public hearing before the Committee on Civil Service Employees of the City Council. The wording of the bill is the most drastic yet composed as it definitely aims to nullify the favorable provisions of the City Charter and the favorable construction the courts have put upon it which now permits the employment by the city of private architects and engineers in a "consulting capacity," and that was construed to include full services if so engaged. The new bill attempts to nullify both these advantages.

The consensus of present opinion is that the bill will go back to the Committee for an indefinite stay, though the professions must be constantly alert for whatever may happen. It is certain that the Administration as well as public-minded citizens are opposed to any attempt to tie the hands of the city and deprive it of the same freedom of contract that is enjoyed by any successful organization, be it governmental or private in character, that carries the responsibility of serving its constituents to the best of its ability and with the best talent available.

Driven by these ceaseless attacks on the contract rights of the profession, the Chapter has under consideration, as a counter move to these measures, a legislative proposal of its own that aims to establish once and for all what is the true scope and limit of a governmental architectural bureau that would be fair to the Civil Service, to the professions, and to the public at large, as well as compatible with the exigencies and responsibilities of the city government.

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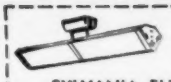

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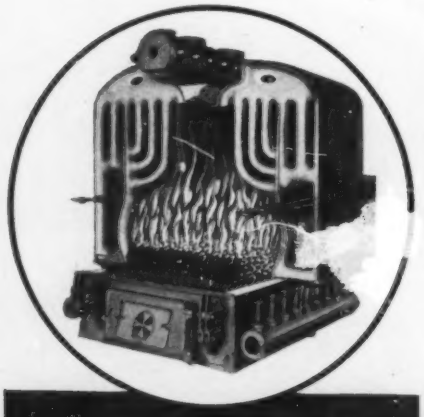

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REQUIRED READING

(*Continued from page 30*)

change in our [construction] methods —a change long overdue."

The greater part of Mr. Kaestner's article is devoted to a description of the prefabricated school developed by the E. J. Kump Co., Architects & Engineers, and the Standard Engineering Corp. of San Francisco.

"The work done in prefabricated and manufactured construction has only scratched the surface of its latent possibilities," Mr. Kaestner concludes. "The point is to design something better now and to continue on into the postwar period."

PHYSICAL PLANNING

Problem No. 2: What Kind of Training Will the Planners Need? *By. Dr. E. A. Gutkind. The Architects' Journal, Cheam, Surrey, Eng. (45 The Avenue), Nov. 11, 1943. pp. 353-355.*

With definiteness and clarity, Dr. Gutkind here considers the troublesome problem of how to "plan the planners" of tomorrow. "We must produce a new type of coordinator and general practitioner," he avers.

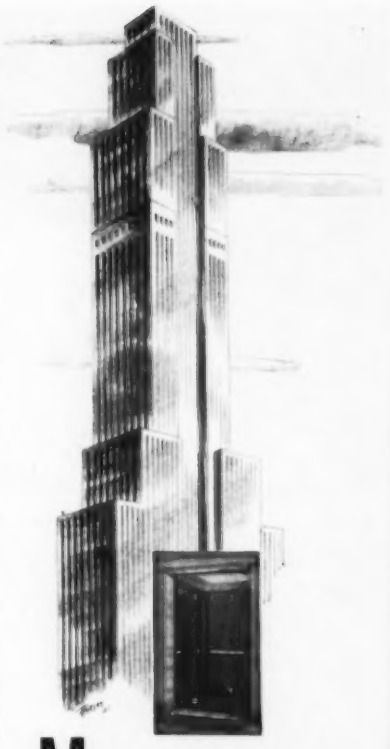
"National planning must be restricted . . . to those activities which are clearly common to all parts of the nation, and it must draw a clear line between centralized authority and centralized administration." Else, in Dr. Gutkind's opinion, we will drift into a totalitarian state of affairs.

Dividing planners into three classes — national, regional and local — Dr. Gutkind discusses the peculiar qualifications required by each. The national planner is not concerned with the working out of plans in detail, he says, but relies on the knowledge and expert ability of the specialists. The regional planner must be "region conscious" and must develop a regional program and carry it out. The local planner must be able to organize the work on the spot and to deal with the many intricacies of local government.

PLASTICS AND THEIR PLACE IN POSTWAR BUILDING

By H. H. Lusty. The Architect and Building News, London, E.C.4 (2 Breams Buildings), Nov. 12, 1943. pp. 106-108.

Brief as this paper is, it gives a good digest of the whole subject of plastics, starting with definitions, continuing with a description of the physical characteristics, discussing the various types of plastics—moulded and sheet—and the application to the building industry to date, with some consideration of their future. The article concludes with a few paragraphs on the improvements made recently in the physical properties of plywood, its uses to date and its probable future developments.



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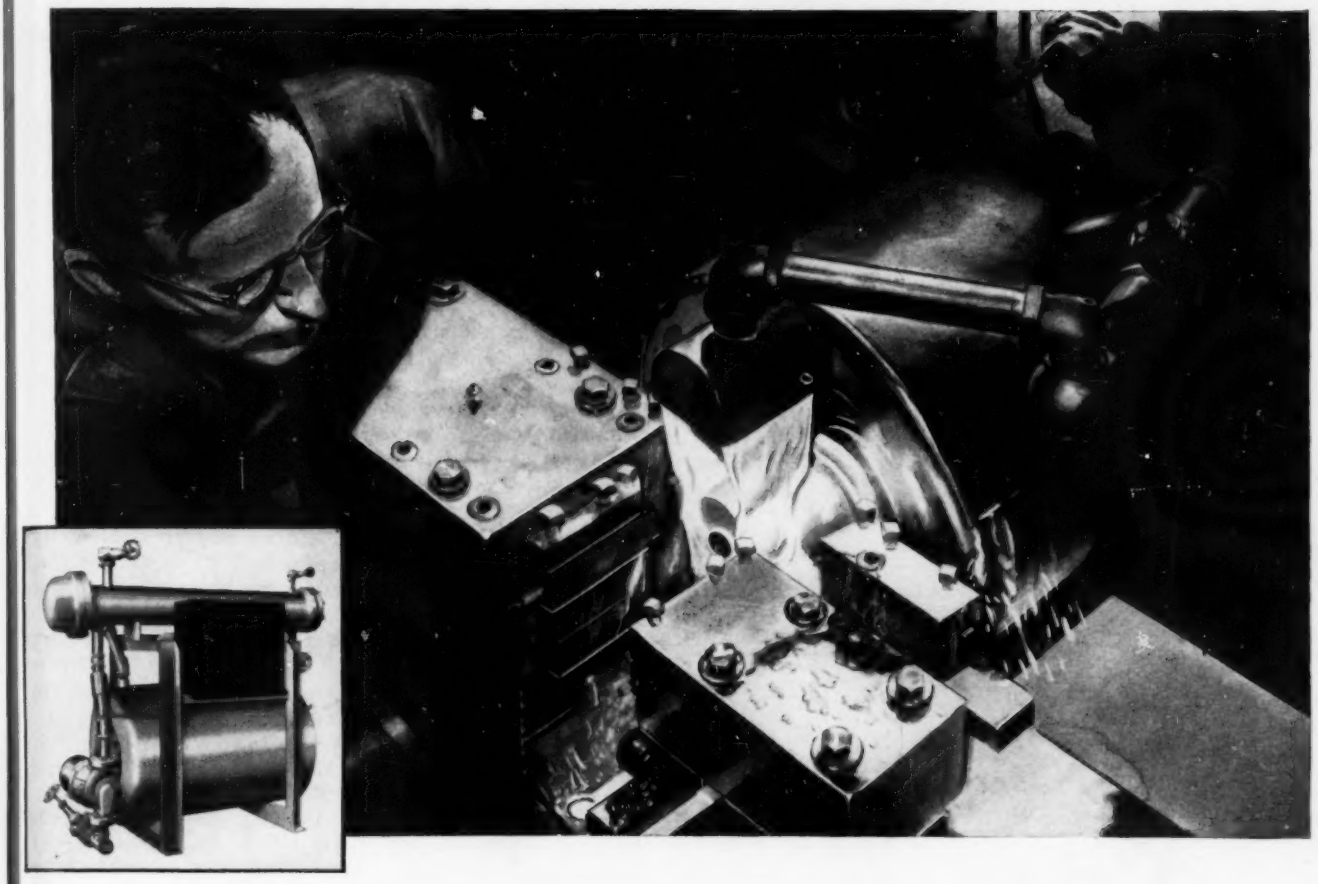

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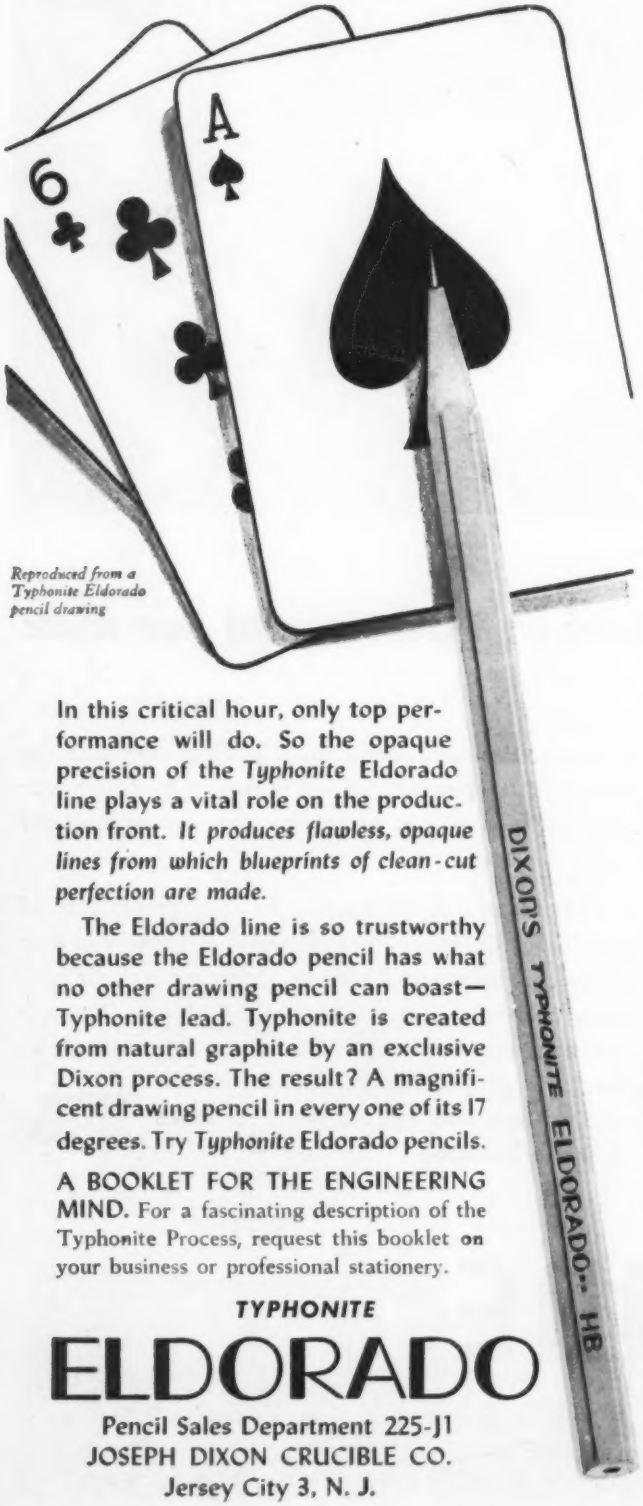

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(Continued from page 86)

tremendous investment in these materials will be liquidated. It is much more likely that new uses will be found for them, and that they will gradually find their way into the construction of houses and the equipment that goes into them. Because of the possibility of their production in large quantity it is reasonable to believe that they will eventually materially decrease housing costs.

However, that is a very long-range view, and, to get back to the immediate postwar problems and the speed with which new housing can be constructed, there are many items that will enter into costs. The availability of labor and the high wages paid to labor during wartime, as well as the higher price level of building supplies are elements that may affect costs in the immediate postwar period. Also the rental levels prevailing as a result of rent controls, should they remain in force for a while, may affect the construction of new houses at prices that cannot meet the competition in the available rental market of existing houses.

Another factor to be kept in mind is the rate at which labor has migrated to war centers returns to former places of residence. How many workers will elect to remain in the new localities and how many will leave are questions which are very hard to answer now, but which will have a bearing on home construction after the war.

Closely related to this problem and affecting the market also is the removal of the public housing consisting of purely temporary structures. The law as it stands at present directs that such structures be removed within two years of the close of the war, unless unusual circumstances justify its longer use in the opinion of the Administrator of the National Housing Agency and if the community involved agrees that continued use is necessary. I think every one agrees that that is a desirably policy, but if we are realistic we know that all the present tenants cannot be turned out on the streets with no place to go and that some agency, either the private builder or the government, will have to provide for the more permanent housing needs of those who remain in the community.

But most important in the postwar outlook for FHA and for the building industry is the one fact that FHA will be ready to assist private builders and private capital in the recovery period. And private enterprise must be ready to resume its normal and proper functions if we are to recover the kind of national economy in which we all believe.

Let me recapitulate. We are ready to give assurance to nearly 6,000 financial institutions—banks, savings and loan associations, personal loan companies—eligible to make them that we will back them on the personal loans which they will make for home repairs and improvements.

We are ready to say to over 9,000 financial institutions now holding insured mortgages that we will insure the financing of existing and new homes. And for this purpose we have available now a half billion dollars of insurance authorization and an additional billion upon presidential approval. In other words, just as in 1934 the FHA assisted the private building industry to rise from the depression, we are now prepared to aid private builders to revive normal home building activities immediately after wartime restrictions are lifted or as they are partially lifted.